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Water Resources Survey



Part I:

HISTORY OF LAND AND WATER
USE ON IRRIGATED AREAS

Custer County, Montana

Published by

STATE ENGINEER'S OFFICE

Helena, Montana, July, 1948

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STATE ENGINEER'S OFFICE

State Engineer Fred E. Buck
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MONTANA STATE AGRICULTURAL EXPERIMENT STATION

O. W. Monson Irrigation Engineer and Consultant

July, 1948

Hon. Sam C. Ford
Capitol Building
Helena, Montana

Dear Governor Ford:

Submitted herewith is a consolidated report on the Water Resources Survey of Custer County, Montana. This work is being carried on by funds made available to the State Engineer by the Thirtieth Legislative Session, 1947, and in cooperation with the State Water Conservation Board.

The report is divided into two booklets—part one consisting of the history of land and water use, irrigated lands, water rights, etc., while part two contains all of the township maps showing in color the lands irrigated from each canal.

The office files contain minute descriptions and details of each individual water right, water and land use, etc., which are too voluminous to be included herein. These office files are available for inspection to those who are interested.

Mr. Gerald J. Oravetz, Assistant State Engineer, has directed the detail office and field work of this project and is entitled to much credit for the excellent accomplishment.

Respectfully submitted,

FRED E. BUCK, State Engineer

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A survey and study of water resources involves many phases of work in order to gather the necessary data to make the work both complete and comprehensive. Appreciation of the splendid cooperation of various agencies and individuals who gave their time and assistance in gathering data for the preparation of this report is hereby acknowledged.

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Foreword

In nearly all of the 17 Western Reclamation States a water right is obtained by first making a filing with some legally designated central state agency—usually the State Engineer's Office—setting forth the amount of water desired and the area proposed to be irrigated. A study is then made of the sufficiency of the water supply and, if found adequate, a permit for use of the water is issued and recorded. If studies show that the stream is depleted, the application is denied. The procedure in Montana, however, is vastly different.

In Montana a right to the use of water from a stream not adjudicated by the courts is acquired by posting a notice on the stream and filing a copy of same in the office of the county clerk of the county wherein the appropriation is located, and by proceeding to divert and use the water. Where a person diverts and uses water from a stream without posting or filing a notice, a water right based thereon has been recognized as valid by the courts. Whenever it becomes necessary to adjudicate the stream, both methods of acquiring rights have been recognized by the courts, and the amount of water finally decreed and dates of priority in either case are determined by the evidences and proofs.

Under Montana law there is no restriction as to the amount of water one may designate in his notice of appropriation. As a consequence, the amount set forth in the filing in no way indicates the amount being diverted and used, nor does it show whether or not the water was ever used at all to perfect the right. Nor is there any relation whatsoever between the amount filed on and the normal flow of the stream. To further complicate this matter, our courts have made it almost impossible to prove the abandonment of a water right.

There is no central office in the State where recordings are filed, or any supervision over the distribution of water from unadjudicated streams. One wishing to study the validity of a water right must make a search of the county records wherein the stream is located and perhaps two, three, or more counties if the stream courses through them. About the only result one will accomplish by such a research will be a tabulation of the dates of filing. The amounts of water filed on will be of no consequence; there is no conclusive evidence that the recorded appropriations have been perfected, and there is no record of the rights which are being used but never recorded. Therefore, a purchaser of ranch property, where he has to depend upon irrigation from a stream that is not adjudicated, has no way of determining the validity or priority of his water right. He has no assurance of the value of the right until the stream is adjudicated by the court, when each claimant must prove his claim by material witnesses.

The pioneers who are able to offer direct testimony in adjudication suits are rapidly passing on. One phase of this Water Resources Survey is to obtain all of the first-hand information possible on water and land use from the "old-timers" who are left, before it is too late. These data will include every known water right up to the time of completing the work in the respective counties, and the information will be on file for inspection in the State Engineer's Office. At the time of this publication, Yellowstone, Carbon, Stillwater, Big Horn, Custer and Rosebud Counties are completed, with work progressing on Musselshell, Golden Valley and Wheatland Counties. A prospective land purchaser, after studying the record in these counties may have a good idea of the sufficiency and priority of the right appurtenant to the land in question.

In this and succeeding volumes of the data compiled by this Water Resources Survey, it is the intention to provide as much information as is possible relative to the water right records of the various counties, as well as to assemble such other information as may be available from all sources having knowledge of these various water rights. Every precaution is being taken to avoid errors in the compilation of these data.

The results of this work were used in negotiating the Yellowstone River Compact between the States of Wyoming, North Dakota and Montana. In arriving at an equitable division of the waters between the states, it was necessary for Montana to have a catalog of its irrigated land and water use. This same question may arise in other river basins. Again, it is highly important that Montana gather such data, and thereby be able to defend its water rights in the development of the great river basins of the Missouri and Columbia Rivers.

The subject of water rights is coming more and more into prominence as the rapid expansion of our irrigated area proceeds under the impetus of both State and Federal development programs. As new canals are dug and old canals and ditches are enlarged and extended, the relative area of land to be irrigated compared to the water supply available for irrigation becomes greater, and a competition for the limited water supply results, which often develops into controversy over the right and ownership of the water.

In a strict sense a "water right" on a live stream does not imply ownership in the same way as does a deed to a tract of land or a certificate of title to an automobile. A water right implies only the right to divert and use water from river or stream. Water when stored in a reservoir, however, is recognized as real property which may be sold, or disposed of as desired by the owner. The ownership to the water of our rivers and streams rests in the State and the rules under which the State grants to the individual the right to use these waters are known as Water Right Laws.

The early settlers in Montana took up land under the provisions of the Homestead Law of 1862 and the Desert Land Act of 1877. The former act gave 160 acres of land to anyone who settled on it and put it in cultivation. The latter gave 640 acres of land to anyone who would irrigate it and pay the government \$1.25 per acre. In 1890 filings, under the Desert Land Act, were reduced to 320 acres. The construction of ditches on desert claims was in compliance for title to land, rather than for irrigation, and little attention was paid to the water supply available. Consequently, miles of ditches were dug through which no water ever flowed. This is especially true in the drier parts of the state, where the diversions were made from intermittent streams.

In the more fertile mountain valleys irrigation was given more importance than in the plains country. Live streams provided a dependable source of water supply and the ditches which tapped them were designed to actually carry water, not merely to comply with a legal requirement to obtain title to a piece of land. Thus, the right to diversion and use of water for irrigation became as important as the acquisition of title to the land.

But, while the government granted a patent deed as evidence of title to the land upon proof of compliance with the Homestead Laws, there was no deed, certificate of title or other legal instrument offered as evidence of title to a water right.

Water rights refer also to other uses than irrigation. Thus, the authorized use of water for mining, power, fish hatcheries, bird refuges, recreational purposes, municipal needs for culinary supply and sewage disposal, manufacturing, or navigation, all may become valid water rights.

The first irrigators took for granted their right to use water from creeks or rivers for irrigation. They saw water going to waste and appropriated it to their needs. It was as free to them as the air they breathed. They made no official record of the game they shot for food or the fish they caught in the streams and likewise considered it unnecessary to make official record of the time, place, or the amount of water diverted for irrigation. However, time has changed these conditions and it is now necessary to record the game killed and limit the fish catch, and also file a claim for the water appropriated from the streams and rivers for irrigation or other use.

When game was plentiful, no one concerned himself with the number of deer a person killed, but when game became scarce, steps were taken to prevent a few persons from taking more than their share while others had to go without. To do this it became necessary to issue licenses or permits to kill game and also to keep a record of game killed, a practice which is still followed.

Likewise, when only a few settlers diverted water for irrigation and the supply was more than enough for all, no one was concerned about the exact amount used by any one person. But as more and more settlers constructed diversion dams and ditches and tapped the rivers and streams for irrigation water, it soon became evident that there would not be enough water for all. Thus, a year with low water brought about disputes over the division of the supply. The older settlers, in such cases, demanded that the later comers close down their headgates and refrain from taking water, in order that the prior appropriations might have a full supply. The later users, on the other hand, insisted that the available supply be divided among all users so that all might share alike.

Thus, progressive over-development of irrigation, together with the occurrence of seasons of water shortage, combined to bring about the enactment of Water Right Laws in the Western States where irrigation is practiced.

Method of Survey

Data incorporated in this report were obtained by the field survey method in cooperation with the irrigators on the land.

For irrigation systems under private ownership, water users were asked for specific information as to the source of water, present acreage irrigated, potential irrigable acreage under existing works, seeped acreage, condition of irrigation system, type of system, water supply, dates of priority, and the amount of water appropriated or decreed. This information was then recorded on a field form and later checked as to its authenticity.

The information in regard to the location of the irrigation system, present irrigated and potential irrigable lands, was indicated on aerial photographs with the exact location of each shown, and the various systems distinguished by color. The procedure for land under Government owned projects, irrigation districts, and incorporated ditch companies was the same, except that all of the individual operators were not contacted.

After the field survey was completed, the information was mapped on township maps from the aerial photographs, by means of projection, to insure the utmost in accuracy. In addition to the information pertaining to irrigation, all culture, drainage, section lines, etc., were taken in order to make complete and authentic township plats for the area concerned. This information was then mapped by farm units on individual farm forms that show the farm boundary, the location and type of irrigation system, location of irrigated and potential irrigable lands, present irrigated acres, potential irrigable acres, type of system, source of water, etc., with water filings attached. If the field survey information was complete, these individual farm forms were completed in the office. If not, the water user was again contacted in an attempt to complete the form. After these farm unit forms were completed, a summary was made of each township, which shows the name of the water user, section, township and range, source of water, whether a user has a private irrigation system or is under a ditch company or irrigation district, acres irrigated from each source, present irrigated acres, potential irrigable acres under existing facilities, and maximum irrigable acres. The summary given in this report was tabulated from these township summaries to show the totals for the county. After this was accomplished and a final check made, color separation maps were drawn which included from 3 to 10 separation plates, depending on the number of colors that appear on the final township map in Part 2 of this report. Section and township corner locations were obtained by the photo-grammetric system, based on Government land classification maps, county maps, plane table sheets and other sources.

This is the first survey of its kind ever to be consummated in the United States. The value of this work has been well substantiated by giving Montana its first accurate and verified information concerning its water resources under existing irrigation facilities. New lands to be developed by State and Federal constructing agencies are not within the scope of this report. No effort has been made to analyze economic possibilities, or the problems of the irrigated projects, or to make recommendations as to their future development. The facts presented are as found and provide the items and figures from which a detailed analysis can be made.

General Information About Custer County

Early History

In 1804 the Northwest Company sent an expedition into this area to trade with the Sioux and Crows. The party was headed by Francois Larocque. He was the first fur trader in this area, and during his stay he explored the Powder, Tongue, Little Horn, Big Horn and Yellowstone Rivers. Captain Clark, of the Lewis and Clark expedition, traveled down the Yellowstone River through this area in 1806.

Fort Keogh was established in 1877 at the mouth of the Tongue River near Signal Butte, a high knob that was used in the early days for signaling messages by heliograph to the Black Hills 175 miles away.

White men began to settle in the area with the establishment of military forts. These settlers came by the overland route and by the steamboat route, which was the favorite method of traveling during the few months of the year it was available.

Miles City became a frontier town in 1878 and was an important army and river navigation point. The town was named in honor of General Nelson A. Miles.

On July 24, 1879 the Yellowstone Journal, in an article about the Yellowstone Valley, had this to say about frontier life: "Frontier life has its hardships and its vicissitudes wherever it is essayed, and the settlers on the Yellowstone should come prepared to accept in full need his share of ups and downs. The wood-cutter on the river bank, the teamster directing his train, the ranchman watching his herd, the traveler following the roads through the jagged "bad lands," recognizes the constant possibility of danger from hostile Indians, and forestalls it by having always at hand on the pommel of his saddle his rifle ready at any moment to protect himself against hostile demonstrations. It is a poor place for constitutional cowards to come to! Men of delicate nature, overstocked with nerves, had better remain in the East. By the summer of 1880 (the railroad reached this area in 1881) the Northern Pacific Railway will have reached Miles City. Not even an army is as potent a civilizer as the railroad. Before its glistening rails and lightening like career the redman will disappear effectively and permanently. History has demonstrated this fact in other parts of America—and the wiseman is he who avails himself of the lessons of history and profits by them. We believe that all we have said about Indians will suffice to show that the Yellowstone Valley is a region in which careful men can settle with entire safety now—leaving their wives and children to join them in the course of another year—unless they prefer the amenities of life in Miles City, in which case they may as well bring their families along with them."

In spite of hardships, these early pioneers blazed the trail and established transportation around which rose our permanent communities.

Early Agriculture

Soon after the fur traders, and long before the sod hut or the log cabin of the homesteader appeared on the rolling hills or were hidden along the watercourses, the raising of livestock was begun near the forts and trading posts. Next came the Texas Cattle Kings who brought large trail herds of cattle into the area from the South. At that time Custer County included a large territory in southeastern Montana. Cattle increased from 1,935 head in 1880 to more than 200,000 in 1884; by 1886 there were 500,000 head on the ranges. Because of lack of feed and protection from cold, 60 per cent of the range cattle were said to have been lost in the very severe winter of 1886-87. Range cattle had decreased in 1890 to 135,000 head, which had to share the range with 100,000 sheep.

These early ranches were operated by Companies. As a result of the ever increasing number of sheep on the ranges, the Cowmen's Council got up a petition to separate the ranges for sheep and cattle in 1884. This led to the battle for range land between the cattlemen and sheepmen. Although Custer County has always been considered primarily a range country, nearly all of the tillable lands, regardless of their character, were homesteaded and broken during the homestead period. Dry land farming prospered from 1906 to about 1917 under conditions of abnormal rainfall and high prices. During the latter years drought caused repeated failures and dry land farming methods declined.

Irrigation was started soon after settlement in both the larger and smaller valleys. The first lands irrigated were for the production of hay along the valley bottoms. The Miles City Irrigation and Ditch Company was the first large scale irrigation enterprise in the area, organizing in 1886. This project is now operated as the Tongue and Yellowstone River Irrigation District.

Custer County Organization

On May 26, 1864, the Congress of the United States passed the Organic Act creating the Territory of Montana. On February 2, 1865 the Legislative Assembly of the territory defined the boundaries of nine counties, namely: Missoula, Deer Lodge, Beaverhead, Jefferson, Edgerton, Gallatin, Chouteau, and Big Horn. Big Horn County was of tremendous size. It contained approximately 70,000 square miles and covered an area east of the 108 degree of longitude and between the degrees of 49 and 47 latitude and east of the 109 degree of longitude and between the degrees of 47 and 45 latitude. However, Big Horn County did not remain that large very long. On January 15, 1869, Dawson County was detached and it included all of the territory north of the 47th degree of latitude.

After the Custer Battle on February 16, 1877, the name of Big Horn County was changed to Custer. On February 5, 1879, a town situated about two miles below Fort Keogh on the Tongue River was designated as the County Seat, and it was stated that "the town is hereby named and shall hereafter be known as Miles." Some time later the name was changed to Miles City. The area embraced in said County was approximately 35,000 square miles and covered what is now the south part of Fergus, Petroleum, Garfield, and Dawson Counties, all of Mus-

selshell, Yellowstone, Treasure, Rosebud, Custer, Powder River, Wibaux, Prairie, Fallon and Big Horn, and a strip along the east boundaries of Carbon, Stillwater and Golden Valley Counties. It was approximately 138 miles north and south and 288 miles east and west. Succeeding years greatly diminished the area of Custer, however, and the following counties were created from its territory, viz: Yellowstone on February 26, 1883; Rosebud on February 11, 1901; Fallon on December 9, 1913; Prairie on February 8, 1915, but part of its territory was also taken from Dawson and Fallon; and Powder River on April 1, 1919. The present area of Custer County is 3,788 square miles and it is 70 miles in length north and south and 60 miles wide.

Custer County is located in eastern Montana and is bounded on the east by Fallon and Carter Counties; on the north by Prairie County; on the west by Rosebud County; and on the south by Powder River County. Miles City, the County Seat, is the principal trading center of the area.

Transportation

The area is served by two transcontinental railroads—the Northern Pacific Railway and the Chicago, Milwaukee, St. Paul & Pacific Railroad, which follow the course of the Yellowstone River through the County. Miles City is a division point on the Chicago, Milwaukee, St. Paul & Pacific Railroad. These two transportation systems make Miles City an important trading center for the southeastern part of Montana. Custer County is also served by U. S. Highways No. 10, 12 and 212, and State Highway No. 22, with the focal point at Miles City. The County is also served by the Greyhound Bus Line and the Northwest Airlines, Inc. Aside from these transportation facilities the area is well supplied with graded county roads, which make the main highways and railroad shipping points accessible the year around.

Climate

Custer County has a climate typical of the semi-arid Great Plains Region, marked by abundant sunshine, low relative humidity, moderate winds, low precipitation and wide daily and seasonal variations of temperature. Climatic data compiled from records of the United States Weather Bureau Station at Miles City show that the annual precipitation varies considerably from year to year and throughout the growing season. The average annual precipitation is 13.79 inches, but annual precipitations as low as 6.06 inches and as high as 22.75 inches have been recorded. Most of the total rainfall is received between April 1 and September 1, being the heaviest during May and June. The average date of the last killing frost is May 1 and the first killing frost is October 2, giving an average frost-free period of 154 days. Occasionally late spring and early fall frosts cause damage, as do hail and flash summer rains, which at times attain cloudburst intensity. The summer and winter extremes of temperature differ greatly. The highest temperature ever recorded is 112 degrees F. and the lowest minus 65. These are extreme temperatures that are seldom reached and are of short duration. The annual mean temperature is 44.3 degrees. The station elevation is 2,351 feet.

Soils

Preliminary examination of the soils of the Yellowstone River Basin, in which Custer County is located, has resulted in their classification, on the basis of physiographic features, into four groups as follows: (1) Soils of the valley bottoms; (2) Soils of the valley benches and terraces; (3) Soils of the bordering slopes and uplands; and (4) Miscellaneous soils and land types.

The valley bottom soils, deposited by flowing water, are highly irregular, varying in texture from clay to sandy loam. They are generally fertile and well-drained. Much of the present irrigated land in the Yellowstone River Basin includes this soil group.

The second soil group occupies the terraces and benches bordering the stream valleys, rising 25 to 200 feet above the valley floors. They also are alluvial soils but more mature and uniform than those of the valley bottoms. They are fertile, medium textured, and commonly friable and free-working. Under proper management, with an adequate water supply, they are capable of sustaining production of all of the crops grown in this region.

The last two soil groups named above are not generally irrigable. Because of rough topography, thin soil, or isolated positions with respect to an adequate water supply, their agricultural usefulness is limited to dry land farming or grazing.

The soils of the Yellowstone River Basin have developed under semi-arid climatic conditions, which results in the formation of little organic material and the retention of a large proportion of soluble mineral salts. Therefore, the successful irrigation of such soils requires adequate drainage, natural or artificial, to assure removal of excess water that might otherwise be evaporated from the soil surface and leave a concentration of salts. Needed fertilization is generally limited to supplemental nitrogen and phosphate, in both of which crops grow.

(For a detailed soil survey of the middle Yellowstone Valley area see: Soil Survey Series, 1933, No. 33, for sale by the Superintendent of Documents, Washington, D. C., price 35c.)

Crops

Native grass of surprising nutriment was found in great abundance in Custer County when white men first entered the territory. It was the presence of this growth of satisfying and meat-building grass that first attracted the cattlemen of the southwest country to drive their herds into what is now southeastern Montana. To this day ranchers will tell you that native grass is by far the most important crop in this section because of its extent in area and the number of farm and ranch operators engaged in livestock production.

In the replanting of the grazing lands that were plowed under by the homesteader crested wheat grass has become an important feed and commercial plant, having been introduced into this part of Montana in the early thirties. Native hay and alfalfa were the first crops grown under irrigation and produced for winter feed. As more land was put under irrigation, and the population of the valleys increased, the farm units became smaller and a larger acreage was planted to alfalfa and crops that could be used for feed—such as, wheat,

corn, barley and oats. Later, wheat became the principal cash crop. At present, alfalfa occupies the largest acreage of any single crop and must be regarded as the principal crop on irrigated or sub-irrigated land. It is produced as a hay crop and also for seed.

In irrigated areas the sugar beet acreage is nearly equal to that of alfalfa. The acreage planted each year has been increased because of the relatively high cash returns per acre. Segmented beet seed and mechanical machinery have also been a contributing factor to the acreage increase.

Wheat, barley and corn are important cash crops, as well as providing additional feed for livestock. Corn is one of the best yielding feed crops, with some grown for seed. Only a small acreage is devoted to oats on irrigated land. Most units have a small garden for the production of vegetables and fruit; on dry land farms these are watered mostly from artesian wells.

Non-irrigated land on the higher benches, and land adjacent to the irrigated areas where dry land farming is feasible, is used for the production of grain crops. Due to present high prices wheat is the main crop.

Seven hundred thousand bushels of grain are handled annually by the Miles City grain elevator companies, and through these same companies sixty carloads of prepared feeds were shipped in for livestock feeding purposes in 1945.

Livestock

All of Custer County is considered primarily a range country. From its beginning it has been known as the "Cow Country," with large cattle outfits controlling the territory. Later came the large sheep companies. As settlers moved in on the dry lands most of the large livestock companies gradually dissolved, being replaced by smaller livestock ranches and grain farms. These settled ranchers replaced the southern mixed cattle breeds with herds of Herefords, Shorthorns and Aberdeen-Angus. Sheep outnumber cattle and are a most important class of livestock. During recent months sheep have been on the decline because of heavy selling. Both cattle and sheep are brought into the valleys for winter feeding and finishing.

At one time Miles City was considered the largest horse market in the world and it is gaining back this pre-eminence today. Horses are kept on most farms and ranches for draft purposes.

The production of hogs is common on most irrigated farms, with the largest number raised on dairy farms. The number of dairy cattle has been increasing on irrigated farms. Some have sufficient numbers only to supply home needs, and others with larger herds from which the sale of milk or cream is used to supplement the farm income. Flocks of poultry are kept on nearly all of the farms for supplying the farmer's family with poultry and eggs, with the surplus sold locally or traded for groceries. A few farms have colonies of bees for honey production.

During the days of pioneer settlement in eastern Montana the Army established a Fort just west of the present site of Miles City as a guard against Indian violence. It was known as Fort Keogh. When this danger abated, the Fort was placed under the Department of Agriculture and became a United States Range and Livestock Experiment Station. Here experimental work in beef cattle is conducted in cooperation with eight state experiment stations. The experi-

mental work in the breeding of beef cattle and swine is, in point of numbers, the largest station of its kind in the United States. The Range Station comprises 56,600 acres of land on which there are about 2,000 head of cattle, 100 head of horses, and 500 head of swine. The major project in beef cattle is the development of superior producing lines through the use of scientific breeding and new progeny testing methods. A second project deals with intensity of grazing, the results of which are widely used as a basis for proper range management. The swine breeding project has produced a new strain called Hamprace, a strain remarkable for its size of litter and the quick development of the pigs for market, averaging as they will with reasonable care 225 pounds at six months of age.

Water Supply

The principal streams in Custer County from which water for irrigation is diverted are the Yellowstone, Tongue and Powder Rivers and their tributaries. The main diversions for irrigation uses from the Yellowstone River in Custer County are by the Sheffield Private Pumping Project, Kinsey Irrigation Company, the Buffalo Rapids Shirley Division, and the United States Range and Livestock Experiment Station Pumping Unit. The water supply in the Yellowstone River has always been plentiful, but because most of the gravity ditches were built too high to take water when the river flow is lowest during the late summer it has been necessary for diverters to construct dams across the river to raise the water level at the points of diversion. The main stem of the Yellowstone River rises in northwestern Wyoming flowing north through Yellowstone Lake, which has an area of 142 square miles, and provides a considerable amount of natural flow regulation. From Yellowstone Lake the river flows north to Livingston, Montana, where it makes a big bend and then flows northeastward to its confluence with the Missouri River just across the Montana-North Dakota State line near old Fort Buford.

Stream flow records for water-stage recorder located in the northeast quarter of Section 28, Township 8 North, Range 47 East, three-quarters of a mile below the bridge on the Miles City to Jordan highway, and one and one-half miles below the mouth of the Tongue River, shows a maximum discharge of 74,200 second-feet June 26, 1938 (gage height, 10.50 feet); minimum, 996 second-feet December 14, 1932. Records available were from September, 1922 to August, 1923, and August, 1928 to September, 1938. Prior to May, 1928, staff gage at same location and independent datum. Record for period May, 1929, to September, 1931, wire-weight gage at highway bridge three-quarters of a mile upstream. October, 1931 to November 10, 1937, water-stage recorder at highway bridge.

Powder River

"Powder River—one mile wide, one inch deep and runs uphill." Captain Clark named it the Red Stone in 1806 and later found the Indians called it by the same name but pronounced it "Wa-ha-sah." The Powder River headwaters are in the State of Wyoming on the eastern slope of the Big Horn Mountains. These headwaters are divided into three sub-basins—the Clear Creek Basin, the Crazy Woman Creek Basin, and the Upper Powder River Basin. From its source the river flows northeast to near Moorhead, where it crosses the state line into

Montana. It continues in that general direction until past Powderville, where it turns north-northwestward to its confluence with the Yellowstone River some seven or eight miles above Terry. In Montana the Powder River follows a winding course through a narrow valley bounded by rolling benches.

Irrigation in Montana at present is almost negligible because of the erratic supply of water. The lands that are irrigated from the Powder River in Custer County is by pumping. This irrigation is limited to only when the silt in the river is at a minimum. There are many private systems along the river in Custer County that have been constructed in the past but are not now in operation. Because the area through which the river traverses is mostly grazing land, used primarily for the raising of livestock, there has not been too great a demand for irrigation, other than flood irrigation on the bottom lands from side coulees for hay production.

According to Bureau of Reclamation figures, in Montana there are 42,600 acres of potential irrigable land lying in the valley between the Montana-Wyoming state line and the mouth of the Powder River which can be irrigated by individual irrigation systems and pumping plants. It is planned that power for these plants will be delivered from the Yellowtail Power Plant upon its completion. The water supply for these acres is to be provided by the construction of the Moorhead dam which is located near Moorhead in Powder River County, Montana. The reservoir is to have a storage capacity of 390,000 acre feet (not counting the flood control super storage) and is to be a combination flood control, irrigation and silt storage reservoir. The dam is to be of earth construction 175 feet high and 2,600 feet long. Preliminary work is now being done by the Bureau of Reclamation on this project.

Present irrigation development in Wyoming lies along the foothills adjacent to the mountains, and utilizes an extensive, interlaced system of private ditches, diverting the water from one tributary to another. Proposed irrigation projects in Wyoming include 44,460 acres of new land and supplemental water for 47,050 acres of land now irrigated. The above-mentioned area represents the maximum that can receive a reliable water supply, to be secured by construction of Willow Park Reservoir of 9,700 acre-foot capacity, Triangle Park Reservoir of 4,000 acre-foot capacity, Bull Creek Reservoir of 14,000 acre-foot capacity, Smith Reservoir of 30,000 acre-foot capacity, and Middle Fork Reservoir of 50,000 acre-foot capacity. Present Lake DeSmet will be revised to increase its capacity by 44,000 acre-feet. Most of these reservoirs will furnish supplemental water to lands already irrigated in the Upper Powder River watershed.

The principal tributaries to the Powder River are the Little Powder River, which rises near Gillette, Wyoming, Ash Creek, a small stream heading in Custer County, and Mizpah Creek rising near Epsie on the east slope of the Custer National Forest in Powder River County. "Mizpah" is a Hebrew word meaning "The Lord watch between thee and me." It is used as a salutation and as a motto and as a seal, and in this connection it is frequently used as meaning "until we meet again." It was named by Brigadier General William Franklin Reynolds, who camped at the location of the McNiery Ranch on August 2, 1859.

Shortages of water are general throughout the basin, amounting to an average of 47,000 acre-feet annually during the period 1930 to 1938. Stream flow records from May, 1929 to September, 1930 for water stage recorder located in Section 18, Township 9 South, Range 48 East at Moorhead, show a maximum discharge of 14,800 second feet, August 30, 1933 (gage height 10.85 feet) from rating curve extended above 4,000 second feet; no flow at times

during 1931-34. For gage located two miles southeast of Mizpah, one and one-half miles above Mizpah Creek, the maximum discharge observed from records of August, 1928 to March, 1933 was 14,700 second feet, March 12, 1929, (gage height 8.9 feet) no flow at times during 1932.

Tongue River

The Tongue River rises in the northeastern portion of the Big Horn Mountains, in Wyoming, in a number of small streams that flow through gently rolling country before they unite just south of the Montana-Wyoming boundary line to form a single stream. From the Montana-Wyoming state line the stream flows northeastward through Montana for about 225 miles to Miles City, where it empties into the main stem of the Yellowstone River. Throughout the lower area in Wyoming water for irrigation is diverted from the tributary streams. Because of the large acreage under irrigation many of the streams are completely depleted. In Custer County the main diversion is by the Tongue and Yellowstone River Irrigation District. In addition, there are several private diversions and small pumping units. Much of the bottom lands are irrigated by means of flood irrigation from side coulees for the production of hay crops.

The Bureau of Reclamation plan for the Tongue River Basin, in Wyoming, provides for a proposed reservoir of 25,000 acre-foot capacity on the South Fork of the Tongue River, together with a low-pressure pipe line 15,000 feet long, a 2,500 foot penstock, and an installed capacity of 25,000 kilowatts. This will permit the annual development of 55,000,000 kilowatt hours of seasonal secondary power particularly adapted to meet the demands of irrigation pumping. Below the Tongue River Reservoir the plan of development provides for the irrigation of 26,000 acres by the use of small pumping plants.

Stream flow records from April, 1928 to September, 1938 for water stage recorder located in Section 23, Township 9 South, Range 40 East, one and one-half miles east of Decker and two miles north of the Wyoming state line, show a maximum discharge observed, 7,220 second-feet June 2, 1929 (gage height 9.25 feet); minimum daily discharge 2.9 second-feet August 20-21, 1934. Drainage area of 1,610 square miles. For gage located in the southeast quarter of Section 19, Township 6 North, Range 48 East, one mile below Pumpkin Creek, (main tributary to the Tongue River in Montana), and twelve miles south of Miles City. Records available, April to September, 1938, May, 1928 to October, 1932, show a maximum discharge observed, 5,910 second-feet June 5, 1929 (gage height 4.4 feet, old site and datum); no flow at times. Practically all flow diverted at times during irrigation season at Tongue and Yellowstone River Irrigation District Dam one and one-quarter miles above gage.

The Tongue River Dam and Reservoir, a State Water Conservation Board Project, consists of a dam and storage reservoir in the Tongue River about ten miles north of the Montana-Wyoming state line. No canal construction was included as a part of the project. The reservoir has a storage capacity of 73,900 acre-feet to be used for supplemental irrigation along the 200 miles of the Tongue River Valley to its mouth, and also lands in the Yellowstone Valley north and east of Miles City. A total of approximately 30,000 acres are benefited. This dam is the largest of all those built by the State Water Conservation Board. Drainage area above the reservoir site is 1,700 square miles, situated in the high timbered reaches of the Big Horn

Mountains and foothills in Wyoming. The Tongue River Dam is an earth, sand and gravel fill, having a total crest length of 1,810 feet and top width of 36 feet. The Board has had surveys made on 31 possible diversions and pumping units along the Tongue River Valley, representing a total of 116 miles of laterals, which would serve approximately 10,357 acres of land owned by water purchasers aggregating 28,011 acre-feet of water. These surveys were made to show the potential possibilities under the Tongue River Reservoir so that plans of a distribution system could be made.



**SUMMARY OF IRRIGATED LAND BY RIVER BASINS IN THE FOLLOWING
COUNTIES COMPLETED TO DATE:**

Big Horn, Carbon, Custer, Rosebud, Stillwater and Yellowstone

River Basin	Present Irrigated Acres	Potential Irrigable Acres	Maximum Irrigable Acres
Big Horn River Basin	46,915.56	14,850.65	61,766.21
Little Big Horn River Basin	17,134.26	9,843.52	26,977.78
Clarks Fork Basin	33,285.96	7,328.00	40,613.96
Missouri River Basin	54.60	62.00	116.60
Musselshell River Basin	100.80	310.60	411.40
Powder River Basin	8,263.60	1,803.60	10,067.20
Rosebud Creek Basin	1,398.50	3,012.20	4,410.70
Rosebud River Basin	11,831.00	4,724.00	16,555.00
East Rosebud River Basin	4,587.50	9,095.47	13,682.97
Rock Creek Basin	58,482.15	16,866.77	75,348.92
Stillwater River Basin	11,661.20	3,458.50	15,119.70
Tongue River Basin	22,136.56	7,479.48	29,616.04
Yellowstone River Basin	153,833.01	29,879.89	183,712.90
Totals	369,684.70	108,714.68	478,399.38

It was necessary to cover 6,925,942.00 acres in the above basins in order to complete the survey.

CUSTER COUNTY

Irrigation Summary of Custer County by River Basins

MISSOURI RIVER BASIN		Present Irrigated Acres	Potential Irrigable Acres	Maximum Irrigable Acres
Name of Ditch	Source			
Private Ditches—Regular Irrigation				
Private	Finley Creek	10.00	62.00	72.00
Private Ditches—Flood Irrigation				
Private	Crow Rock Creek	44.60	.00	44.60
Totals for Missouri River Basin		54.60	62.00	116.60
POWDER RIVER BASIN				
Private Ditches—Regular Irrigation				
Private (Reservoir)	Dead Horse Creek .....	.00	55.00	55.00
Private (Pump)	Mizpah Creek	1.00	.00	1.00
Private (Pump)	Powder River	195.00	1220.00	1415.00
Private Ditches—Flood Irrigation				
Private	Ash Creek & Coulee	280.00	26.00	306.00
"	Cottonwood Creek .....	.00	30.00	30.00
"	Coulees Trib. to Powder R.	72.60	106.80	179.40
"	Double Corral Creek .....	.00	20.00	20.00
"	Dry Creek	699.20	101.00	800.20
"	Dry Creek & Road Creek	60.10	.00	60.10
"	Forty Creek	20.00	.00	20.00
"	Forty-four Creek & Coulees	273.00	.00	273.00
"	Hay Creek	185.00	.00	185.00
"	Kemp Creek	249.00	.00	249.00
"	Kimball Creek & Coulees	240.00	.00	240.00
"	L. O. Creek	304.60	.00	304.60
"	Lindsay Creek	22.30	.00	22.30
"	Line Creek	43.00	.00	43.00
"	Little Teepee Creek	110.60	.00	110.60
"	Locate Creek	385.00	.00	385.00
"	Locate Creek, West Fork	4.00	.00	4.00
"	Lone Tree Coulee	92.00	.00	92.00
"	Meadow Creek & Coulees	380.00	.00	380.00
"	Mills Creek	130.00	.00	130.00
"	Mizpah Creek & Coulees	294.10	106.00	400.10
"	Meyers Creek & Coulees	545.00	12.00	557.00
"	Nichols Creek	32.20	.00	32.20
"	Pass Creek	30.00	.00	30.00
"	Pinto Creek & Mizpah Cr.	50.00	.00	50.00
"	Road Creek & Mizpah Cr.	106.00	.00	106.00
"	Russell Creek	14.00	.00	14.00
"	Sand Creek & Coulees	159.70	.00	159.70
"	Sand Creek & Mizpah Creek	114.00	.00	114.00
"	Sheep Creek	415.00	12.00	427.00
"	Short Creek	62.00	.00	62.00
"	Snow Creek .....	.00	32.60	32.60
"	South Larney Creek	271.00	.00	271.00
"	Spring Creek	192.20	54.00	246.20
"	Stump Creek	250.00	.00	250.00
"	Swede Creek .....	.00	28.20	28.20
"	Tomathy Cr. & Mizpah Cr.	139.00	.00	139.00
"	Tom Smith Creek	305.00	.00	305.00
"	Tom Smith Cr. & Hocket			
"	Basin Creek	555.00	.00	555.00
"	Trail Creek	319.00	.00	319.00
"	Wolf Creek & Coulees	664.00	.00	664.00
Totals for Powder River Basin		8,263.60	1,803.60	10,067.20

CUSTER COUNTY
Irrigation Summary of Custer County by River Basins
(Continued)

TONGUE RIVER BASIN		Present Irrigated Acres	Potential Irrigable Acres	Maximum Irrigable Acres
Name of Ditch	Source			
Tongue & Yellow. River Irrigation District.....	Tongue River.....	8,890.86	1,183.78	10,074.64
Private Ditches—Regular Irrigation				
Private (Pump).....	Tongue River	1,993.00	674.00	2,667.00
Private Ditches—Flood Irrigation				
Private	Anderson Creek.....	83.00	.00	83.00
"	Ash Creek & Coulee.....	181.00	112.00	293.00
"	Cabin Creek.....	10.00	.00	10.00
"	Circle L. Creek.....	83.00	40.00	123.00
"	Coulees, Trib. to Tongue R.	98.00	50.00	148.00
"	Cross Creek.....	25.00	.00	25.00
"	Dry Creek.....	8.00	.00	8.00
"	Forest Creek.....	60.00	.00	60.00
"	Foster Creek.....	122.00	113.00	235.00
"	Foster Creek, North Fork.....	96.00	.00	96.00
"	Foster Creek, South Fork.....	22.00	.00	22.00
"	Garden Creek.....	.00	55.00	55.00
"	Haddow Creek.....	12.00	136.00	148.00
"	Jack Creek & Coulee.....	96.00	120.00	216.00
"	Johnson Creek.....	169.00	.00	169.00
"	Liscom Creek.....	155.50	.00	155.50
"	Lovett Creek & Coulees.....	158.00	.00	158.00
"	Mill Creek.....	141.00	.00	141.00
"	Nelson Creek.....	50.00	.00	50.00
"	Plunket Creek & Coulees.....	161.00	.00	161.00
"	Pumpkin Creek & Coulees.....	1,452.20	669.00	2,121.20
"	Stony Gulch.....	168.00	.00	168.00
"	Thorpe Creek.....	.00	40.00	40.00
"	Trail Creek.....	78.00	.00	78.00
"	Wolf Creek.....	.00	90.00	90.00
Totals for Tongue River Basin		14,312.56	3,282.78	17,595.34

CUSTER COUNTY
Irrigation Summary of Custer County by River Basins
(Continued)

YELLOWSTONE RIVER BASIN		Present Irrigated Acres	Potential Irrigable Acres	Maximum Irrigable Acres
Name of Ditch	Source			
Buffalo Rapids Project,				
Shirley Unit, Second Div. Yellowstone River		2,797.83	409.00	3,206.83
Kinsey Irrigation Company Yellowstone River.....		6,205.10	779.50	6,984.60
Private Ditches—Regular Irrigation				
	Coulees, Trib. to			
Private (Reservoir)	Moon Creek	51.00	.00	51.00
"	Owens Coulee	99.00	.00	99.00
"	Tree Creek	124.00	50.00	174.00
(Pump)	Yellowstone River.....	2,379.00	1,608.00	3,987.00
Private Ditches—Flood Irrigation				
Private	Bachelor Creek .....	.00	55.00	55.00
"	*Bensley Creek	330.00	118.00	448.00
"	Cabin Creek	175.20	.00	175.20
"	Charlie Creek .....	.00	30.00	30.00
"	Cottonwood Creek .....	.00	3.00	3.00
"	Coulee, Trib. to Jones Cr.	26.00	51.00	77.00
"	Coulees, Trib. to North			
"	Fork Sunday Creek	75.00	.00	75.00
"	Coulees, Trib. to Yellow-			
"	stone River	127.00	39.00	166.00
"	Crooked Creek	4.50	.00	4.50
"	Custer Creek & Coulees	100.50	34.60	135.10
"	Deer Creek	25.00	.00	25.00
"	Dry Creek	55.80	.00	55.80
"	Hay Creek & Coulees	43.70	9.00	52.70
"	House Creek .....	.00	20.00	20.00
"	Kircher Creek	73.00	.00	73.00
"	Lone Tree Creek	5.00	.00	5.00
"	Moon Creek & Coulees	77.90	45.00	122.90
"	Muster Creek	588.00	15.90	603.90
"	O'Fallon Creek & Coulee	14.90	10.00	24.90
"	Pennel Creek .....	.00	15.00	15.00
"	Rock Creek	11.00	.00	11.00
"	Shell Creek & Theada Cr. ..	30.00	.00	30.00
"	Stager Creek & Coulees	263.00	221.00	484.00
"	Sunday Creek	230.00	400.00	630.00
"	Sunday Creek, South Fork ..	.00	179.00	179.00
"	Whitetail Creek	241.00	.00	241.00
"	Whitney Creek .....	.00	50.00	50.00
"	Yellowstone River	560.00	.00	560.00
Totals for Yellowstone River Basin		14,712.43	4,142.00	18,854.43

(*Also called Cottonwood Creek)

CUSTER COUNTY
Irrigation Summary of Custer County by River Basins
(Continued)

Summary

REGULAR IRRIGATION

Name of River Basin	Present Irrigated Acres	Potential Irrigable Acres	Maximum Irrigable Acres
Missouri River Basin	10.00	62.00	72.00
Powder River Basin	196.00	1,275.00	1,471.00
Tongue River Basin	10,883.86	1,857.78	12,741.64
Yellowstone River Basin	11,655.93	2,846.50	14,502.43
Total Regular Irrigation	22,745.79	6,041.28	28,787.07

FLOOD IRRIGATION

Missouri River Basin	44.60	.00	44.60
Powder River Basin	8,067.60	528.60	8,596.20
Tongue River Basin	3,428.70	1,425.00	4,853.70
Yellowstone River Basin	3,056.50	1,295.50	4,352.00
Total Flood Irrigation	14,597.40	3,249.10	17,846.50
Total All Basins	37,343.19	9,290.38	46,633.57

KINSEY IRRIGATION COMPANY

The lands now irrigated by the Kinsey Irrigation Company have had a long and discouraging history. The first construction of an irrigation system to serve the area was undertaken by resident land owners, who, in 1896, formed the Buffalo Rapids Ditch Company. The system consisted of a high water ditch that diverted water by gravity from the Yellowstone River below the mouth of Sunday Creek. The project embraced the lands below the line of ditch on the north side of the Yellowstone River between the mouth of Sunday Creek and Harris Creek. As a result of insufficient water during the irrigation season in the canal system, and lack of capital to rehabilitate the irrigation system, the Company went defunct.

In 1918 the Buffalo Rapids Irrigation District was formed by the settlers. To finance the District, bonds were sold through the old National Bank and Union Trust Company of Spokane, Washington. Mr. Frank V. Paine, then Vice-President, inspected the District and made a favorable report to the officers of the bank. As a result a total bond issue of \$123,500.00 was authorized and sold—none of which was repaid. At the time the District ceased to function, the total outstanding indebtedness less warrant interest was \$174,200.00, making an indebtedness of \$53.00 per assessed acre.

The causes why the District went default were attributed to these chief reasons: farmers deserting the project, defaulting neighbors, joint liability and inadequate water supply. Due to these causes the land owners lost their lands to Custer County for taxes and the District became inert.

During the life of the District a new syphon was constructed under Sunday Creek. To finance this structure money was secured through a second bond issue in the amount of \$30,000.00. The District also rebuilt the old ditch and changed the point of diversion, which necessitated the construction of a new ditch and headgate further up the Yellowstone River. The entire irrigation system was dependable on gravity flow from the Yellowstone River made accessible through a high water intake.

Several attempts were made to reorganize the District and rehabilitate the irrigation system. One of the first of these was to form a Bondholder's Protective Committee through which all interests of the District were merged into one ownership.

On September 5, 1935 an application for \$100,417.00 was made to the Work Projects Administration in an effort to rehabilitate the project. This included construction of a rock filled, pile timbered, submerged diversion dam across the Yellowstone River and other improvements in the irrigation system. On April 16, 1937 ten W. P. A. workers were assigned to the project and the State Water Conservation Board made available one Diesel-powered caterpillar.

During this time an agreement with the bondholders committee of Spokane had been reached whereby, upon payment of \$2,600.00, the property would be turned over to a Mr. Calvin. Later that year a good deal of trouble was encountered between the Board, Mr. Calvin and the District. This disagreement resulted with the Board ordering work to be stopped on the project.

As of May 18, 1938 the W. P. A. labor on the project amounted to \$35,719.00, with materials totaling \$37,692.00. The W. P. A. proposal called for \$75,000.00 of Federal funds, with the balance being paid by the sponsor. Of this amount the Board had advanced \$4,393.00.

The whole set up was very unsatisfactory and again plans to rehabilitate the District failed. As a result of an investigation made by the Montana Rural Rehabilitation Corporation of the Kinsey area as to its suitability for resettlement purposes the stage was set for the final act. Funds were advanced by the Montana Rural Rehabilitation Corporation for the purchase of the original land and to pay certain administrative costs in connection therewith. This was the only part the Montana Rural Rehabilitation Corporation took in the development of the project. The purchase price of the land was about \$13.00 per acre.

In 1938 the Kinsey Farms Resettlement Project, as it was then known, was approved by the Secretary of Agriculture for development by the Resettlement Administration. The Project plan provided for the creation of a co-operative organization made up of resettlement clients. In 1938, Kinsey Farms, Inc., was organized under the Resettlement Administration. The Articles of Incorporation and By-Laws to follow outline its organization and purpose. Soon after this the name of the Resettlement Administration was changed to the Farm Security Administration; however, the name change had no effect on the development of the Project and work as usual was carried on under the name of the Farm Security Administration until the liquidation of the Project as such in 1945.

ARTICLES OF INCORPORATION of KINSEY FARMS, INC.

KNOW ALL MEN BY THESE PRESENTS: That we, the undersigned, have this day voluntarily associated ourselves together for the purpose of forming a corporation pursuant to and under the provisions of Section 5900 to 6013 of Anderson and McFarland's Revised Code of Montana, 1935, and certify that:

FIRST: The name of this corporation is Kinsey Farms, Inc.

SECOND: The purpose of this Corporation is to engage in and cooperatively exercise the hereinafter enumerated powers and functions for the rehabilitation, advancement and betterment of its members and for the encouragement of agriculture and horticulture. In furtherance of such purpose and of the general powers conferred by the laws of the State of Montana, but not in limitation thereof, this corporation shall have the power to do any and all of the following enumerated things:

- (a) To carry on any lawful agricultural, dairy, mercantile, mining, manufacturing, or mechanical business.
- (b) To purchase or otherwise acquire, hold, own, mortgage, lease, sell, convey, or otherwise dispose of, trade and deal in goods, wares, merchandise and chattels of every class and description whatsoever: and to engage in any activity in connection with the purchase, hiring, or use by others of services of every nature and description whatsoever.
- (c) To acquire or assist in acquiring in any manner, dispose of or assist in disposing of in any manner, establish, own, equip, operate, maintain, improve, administer and supervise any stores, buildings, plants, mills, gins, warehouses, factories, dairies, restaurants, gardens, industries, power plants, water plants, telephone systems, commercial establishments, repair shops, other improvements and facilities, or any other enterprises or activities of any kind and

to perform any other necessary or desirable operations or functions in connection therewith.

(d) To engage in any activity in connection with the producing, marketing, selling, harvesting, preserving, drying, processing, canning, packing, ginning, compressing, storing, handling or utilization of any products; or the manufacturing or marketing of the by-products thereof.

(e) To buy, sell, mortgage, own, lease, and improve realty and erect buildings thereon.

(f) To cooperate with any governmental agency or agencies, whether national, state, county, or municipal, or with any public or private agency whatsoever, in the purchase, construction, equipment, operation, maintenance or supervision of any undertaking of this corporation designed to effectuate the purposes herein set forth.

(g) To enter into, make and perform contracts of every kind and description, for any purposes or use necessary, convenient, useful or incidental to the accomplishment of the purpose of the corporation, with any person, firm, association, corporation, municipality, county, state, body politic or government, or agencies thereof.

(h) To borrow or raise moneys necessary or convenient to the accomplishment of the purposes of this corporation, and, from time to time, without limitation as to amount, to draw, make, accept, endorse, execute, issue, sell, pledge, or otherwise dispose of promissory notes, drafts, bills of exchange, warrants, bonds, debentures, and other negotiable and non-negotiable instruments and evidences of indebtedness and to secure the payment of any thereof and the interest thereon by mortgages upon or pledge, conveyance or assignment in trust of the whole or any part of the property of the corporation, whether at the time or thereafter acquired.

(i) To acquire in any manner, hold, sell, assign, transfer, mortgage, pledge or otherwise deal in or with the capital stock, bonds, or other securities or evidences of indebtedness, as well as any dividends, interest, premiums or profits thereon, of any domestic or foreign, private or public corporation, and while the holder of such stock or other securities or indebtedness to exercise all the rights and privileges of ownership, including the right to vote thereon, and the right to transfer the same unconditionally or otherwise, to the same extent as natural persons might or could do.

(j) To do any and all of the things herein set forth, and, in addition, any and all other acts and things and carry on any lawful business, necessary, convenient, useful or incidental to the attainment of its purposes or to its protection and benefit, as fully and to the same extent as natural persons lawfully might or could do as principals, agents, contractors, or otherwise, and either alone or in company with others, in so far as such acts and business are permitted to be done by a corporation organized under the laws of the State of Montana, whether or not such acts or business are similar in nature to the purposes set forth in these articles.

(k) The foregoing enumeration of specific powers shall not be held to limit or restrict in any manner the powers of this corporation as provided for under the laws of the State of Montana.

THIRD: The principal business of this corporation will be transacted at its office located in the Town of Kinsey, Custer County, Montana.

FOURTH: The period of existence of this corporation shall be for forty years.

FIFTH: The business of this corporation shall be transacted by a Board of Five Directors, each of whom shall be a member of this corporation. The Directors shall be elected in the manner prescribed by the By-Laws of this corporation. The names and addresses of those selected as Directors for the first three months of the existence of this corporation and until their successors are elected and qualified are as follows:

NAME	ADDRESS
Victor E. Edwards	Ismay, Montana
Clayton Carey	Ismay, Montana
Henry W. Zabel	Ismay, Montana
James S. Fleming	Ismay, Montana
Glen L. Brittenham	Ismay, Montana

SIXTH: This corporation shall not issue or cause to be issued capital stock of any kind whatsoever.

SEVENTH: Any person 21 years of age or over, who resides on the Kinsey Flats Project and who is approved for membership by the Board of Directors, may become a member of this corporation upon complying with the terms and conditions of membership prescribed in the By-Laws of this corporation; provided, however, that no more than one (1) person in any family may be admitted to membership. The membership certificates of this corporation shall be in such forms as shall be provided for in said By-Laws, and they shall not be assignable or transferable except as may be specifically provided for in said By-Laws.

Witness our hands and seals in duplicate this 17th day of December, 1938.

(SEAL)

Clayton Carey
Henry W. Zabel
Glen L. Brittenham
James S. Fleming
Victor E. Edwards

STATE OF MONTANA }
COUNTY OF CUSTER } ss.

Be it remembered that on this 17th day of December, 1938, personally appeared before me Robt. L. Anderson, a Notary Public in and for the County and State aforesaid, Mr. Clayton Carey, Mr. Henry W. Zabel, Mr. Glen L. Brittenham, Mr. Victor E. Edwards, and Mr. James S. Fleming, whose names are subscribed to the foregoing instrument as incorporators and each of whom duly acknowledged to me that they, and each of them, executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

Robert L. Anderson,

Notary Public for the State of Montana, residing at Ismay. My commission expires June 1, 1940.

SEAL

By-Laws of Kinsey Farms, Inc.

ARTICLE I

Section 1. The name of this Corporation is KINSEY FARMS, INC.

Section 2. The principal office of this Corporation shall be located in the town of Kinsey, Custer County, Montana.

ARTICLE II

Section 1. The seal of this Corporation shall have inscribed thereon the name of the Corporation, the year of its organization, and the word "Montana", and shall be in the custody of the Secretary.

ARTICLE III

Section 1. The fiscal year of this Corporation shall begin on the first day of January of each year.

ARTICLE IV

Section 1. The members of this Corporation shall consist of the Incorporators, the Directors named in the Articles of Incorporation and the owners of membership certificates of this Corporation. Upon the completion of the organization of this Corporation, the incorporators and the directors named in the Articles of Incorporation shall each pay a membership fee of One Dollar (\$1.00). Any person Twenty-one (21) years of age or over, who resides on the Kinsey Flats Project, and who is approved for membership by the Board of Directors of this Corporation shall be entitled to membership in the corporation; provided, however, that no more than one (1) person in any family may be admitted to membership.

Section 2. Application for membership shall be made on an application blank prescribed by the Board of Directors. The application must be accompanied by the membership fee of One Dollar (\$1.00), which will be returned if the application is not accepted. Upon acceptance of the application, the Secretary shall issue to the new member a membership certificate signed by the President and the Secretary; shall enter the name of the new member upon the books of the Corporation; and, shall present him with a copy of the By-Laws.

Section 3. Upon the death, adjudication as an incompetent, permanent and total physical incapacitation for work, or sentence to incarceration for a term of six (6) months or longer of any member, his membership shall terminate automatically, and the Secretary shall strike his name from the books of the Corporation. Neither he nor his legal representatives shall be entitled to any further benefits or privileges in the Corporation, except as hereinafter specifically provided. The membership certificate of such member shall be deposited with the Secretary for redemption, at the option of the Board of Directors, at its fair value as determined by the Board. If the Board does not exercise this option within thirty (30) days of such deposit, the certificate may be transferred by the member or his legal representative, with the written consent of the Board, to any person who meets the qualifications of Section 1 of this article. Such fair value and the member's return from labor or patronage declared for that year shall be paid in cash to such member or his legal representative within one (1) year of such payment shall

first be applied to any indebtedness of the member to the Corporation, in which case the member or his legal representative shall be notified in writing of the amount so applied.

Section 4. Any member who has failed to cooperate in the purposes and objects of this Corporation, or has acted contrary to the best interests of this Corporation, may be expelled by the members upon the recommendation of the Board of Directors, provided that such member is given an opportunity to appear in his own defense before the next regular or special meeting of the Corporation following the Director's meeting at which such recommendations shall have been made, and provided that such recommendation is approved by a majority vote of the members present at such meeting. The membership certificate of a member so expelled shall be dealt with in accordance with Section 3 of this Article. Such member shall be entitled to his share of income for that year.

Section 5. Any person desiring to withdraw from the Corporation may do so by depositing his membership certificate with the Secretary of the Corporation to be dealt with in accordance with Section 3 hereof.

Section 6. A record of the members, their full names, addresses, and ages at the time of admission in the Corporation shall be kept by the Secretary. Each member shall notify the Secretary immediately of any change in his address.

Section 7. No membership certificate shall be assignable or transferable otherwise than as hereinafter specifically provided; and, every certificate issued shall bear on its face the words "NOT TRANSFERABLE except in accordance with the provisions of Sections 3, 4 and 5, Article IV of the By-Laws of this Corporation."

ARTICLE V

Section 1. Regular meetings of this Corporation shall be held quarterly on the second Tuesday of the months of January, April, July and October of each year at such hour and such place within the State of Montana as may be determined by the Board of Directors and specified in the call to meeting. The January meeting shall be known as the annual meeting. Notice of such meetings shall be given by the Secretary of this Corporation by mailing or delivering written notice thereof to each member of record at his address as it appears upon the records of the Corporation at least ten days prior to the date of such meeting. Such notice shall state the time, place and purpose of such meeting and the business to come before it.

Section 2. Special meetings of the members may be called at any time by action of the Board of Directors and such meetings must be called whenever a petition for such meeting stating the business to be brought before the members is signed by at least ten (10%) percent of the members and presented to the Secretary or to the Board of Directors. Notice of such meetings shall be given by the Secretary in the manner provided in Section 1 of this Article. No business shall be transacted at any special meeting other than that specified in the notice or call to such meeting.

Section 3. A majority of the members of this Corporation, represented either in person, or by proxy as defined in Section 6 of this Article, shall constitute a quorum for the transaction of business at any regular or special meeting and no business shall be transacted at any meeting unless such quorum is present. If, however, such quorum shall not be present at any meeting,

the members present shall have power to adjourn the meeting from time to time without notice other than announcement at the meeting until a quorum shall be present. At such adjourned meeting, at which a quorum shall be present, any business may be transacted which might have been transacted at the meeting as originally called.

Section 4. The order of business at regular membership meetings shall include: Roll Call, Reading of minutes of the last regular or special meeting, Report of Secretary, Report of Treasurer, Report of General Manager, Report of Committees, the quarterly report of the Board of Directors, Unfinished business left from previous meetings, new business, and Elections.

Section 5. Each member shall have one vote and only one vote on all occasions, except that in the election of directors each member shall have the right to cast as many votes in the aggregate as shall equal the number of directors to be elected at such election, and each member may cast the whole number of votes for one candidate, or distribute such votes among two (2) or more candidates. Voting on all matters other than election of Directors shall be by show of hands, unless the majority of members present at the meeting shall decide to vote by ballot.

Section 6. The term "proxy" and the mode of voting by proxy is defined as follows: At any regularly called general or special meeting of the members of this Corporation, any member may, in case of sickness or other unavoidable absence, designate in writing some other member of the Corporation to act for him at such meeting; provided, however, that no member shall be permitted to exercise the rights of more than one (1) absent member.

ARTICLE VI

Section 1. The property and business of the Corporation shall be managed and directed by a board of five directors, each of whom shall be a member of this Corporation. The first Board of Directors consisting of those named in the Articles of Incorporation, shall serve for the first three (3) months of the existence of this Corporation and until their successors are chosen and have qualified. At the first annual meeting following the expiration of the terms of office of the directors designated in the Articles of Incorporation, two directors shall be elected for a term of one year; two directors shall be elected for a term of two years; and one director shall be elected for a term of three years. Thereafter, at each regular annual meeting the members shall elect for a term of three years the number of directors whose terms of office expire at that time. Directors shall be elected by a written ballot from nominations made and seconded at the meeting, and the nominees equal in number to the number of directors to be elected at such meeting, receiving the highest number of votes, shall be declared elected.

Section 2. Immediately after their election, the directors shall organize by electing a president, who shall be from among their own number, and a vice president, a secretary, and a treasurer. The term of office of each officer shall be for one year or until his successor is elected and qualified. In addition to the officers provided for herein, the Board of Directors shall appoint and fix the duties and salary of the manager or general manager, who shall not be a member of the Board, and such other officers, attorneys and agents as it may deem necessary to carry on the business of this Corporation. Such appointees need not be members of this Corporation,

Section 3. Any Director or officer shall vacate his office if he receives or obtains any direct personal gain or advantage arising from business dealings of this Corporation with an individual, firm or corporation, or if he competes in any way with the business of the Corporation on his private account.

Section 4. Regular meetings of the Board of Directors shall be held on the first Monday of each month at such time and place as may be designated by the Board. Special meetings of the Board may be called by the President, by the vice president or by any two members of the Board. Notice of all general and special meetings of the Board shall be given to each Director by the Secretary of the Corporation by mailing or delivering a written notice to him at his last known post office address at least five days prior to the date fixed for such meeting, setting forth the time, place and purpose of the meeting. Three Directors shall constitute a quorum for a meeting of the Board. At any meeting at which every member of the Board shall be present, although held without notice, any business may be transacted which might have been transacted if notice of such meeting had been duly given.

Section 5. The Board of Directors shall have general power to act for the Corporation in the administration and management of its affairs.

Section 6. If the office of any Director or Directors becomes vacant through any cause, a majority of the remaining Directors, though less than a quorum, shall choose a successor or successors, who shall hold office until the next regular meeting of the Corporation, at which time the members shall elect a Director or Directors to serve until the next regular election of Directors.

Section 7. Any Director may be removed from office in the following manner: Any member may bring charges against any Director by filing them in writing with the Secretary of this Corporation, together with a petition signed by five percent (5%) of the members requesting the removal of the Director in question. No Director shall be removed from office unless by a vote of two-thirds (2-3) of the members of this Corporation at a regular or special meeting held after previous notice of the time and place and of the intention to propose such removal. Such removal shall be voted upon at the next regular meeting of the Corporation following the submission of such petition, or at a special meeting called for this purpose by the president, or a majority of the Directors, or a majority of the members of this Corporation. The Director against whom such charges have been brought shall be informed in writing of such charges previous to the meeting and shall have the opportunity at such meeting to be heard in person or by counsel and to present witnesses; and the person or persons bringing such charges against him shall have the same opportunity.

Section 8. The Directors, the president, vice president, secretary and treasurer shall serve without compensation, but the secretary and treasurer may be paid a reasonable sum for the time actually spent on the business of the Corporation and for any expense incurred thereby.

ARTICLE VII

Section 1. The president shall preside at all meetings of the members and of the Board of Directors; he shall be ex-officio a member of all standing committees; and he shall have the powers and duties customary to that office.

Section 2. The vice president shall, in the absence or disability of the president, perform the duties and exercise the powers of the president, and shall have such other powers and perform such other duties as the Board of Directors shall prescribe.

Section 3. The Secretary shall attend all meetings of the Board of Directors, and the committees of the Board of Directors, and all meetings of the members, and shall record all votes and the minutes of all proceedings in a book or books to be kept for that purpose, and shall perform like duties for all standing committees when required; and he shall have the powers and duties customary to that office.

Section 4. The treasurer shall have the custody of the corporate funds and securities and shall keep full and accurate accounts of all receipts and disbursements in books belonging to the Corporation, and shall deposit all moneys and other valuable effects in the name of and to the credit of the Corporation, in such depositories as may be designated by the Board of Directors; and he shall have general powers and duties relating to the fiscal affairs of the Corporation.

Section 5. The manager or general manager shall have general charge of the business activities of the Corporation, including the following: to engage and discharge the employees of the Corporation in accordance with the authority given by the Board of Directors; to cause accurate books to be kept of the business of the Corporation; to disburse funds of the Corporation in payment of its debts in accordance with authority given by the Board of Directors, taking proper vouchers for such disbursements; and to attend to such other duties and offices as the Board of Directors may require.

Section 6. In case of the absence or inability of any officer or officers of the Corporation to act, or any person herein authorized to act in his place, the Board of Directors may, from time to time, delegate, for the time being, the powers or duties, or any of them, of such officer to any other officer or to any Director.

Section 7. Any officer may be expelled from office in this Corporation for cause by a majority vote of the Directors at any regular or special meeting. If the officer so expelled is a member of the Board of Directors, he shall not participate in the vote upon the question of his expulsion. If an office becomes vacant by reason of death, expulsion or resignation, the Directors shall name a person to fill the office thus vacated for the unexpired term.

Section 8. The treasurer, manager and other officers or employees, having the custody of funds or goods of the Corporation shall each give to the Corporation a fidelity bond in such sum, and with such surety or sureties, as shall be satisfactory to the Board, such bonds to be paid for by the Corporation.

ARTICLE VIII

Section 1. Subject to the provisions of any existing loan agreement between the United States Government and this Corporation, no credit shall be given or taken in the business transaction of this Corporation, except such as may be specifically authorized by the Board of Directors.

ARTICLE IX

Section 1. The Board of Directors shall present at each quarterly meeting, and when called

for by vote of the members any special meeting of the members, a full and clear statement of the business and condition of the Corporation.

Section 2. At the close of each fiscal year the Board of Directors shall provide for an annual audit of the accounts of the Corporation by accountants having no connection with the Corporation, which shall be submitted in written form to the members at the annual meeting in January. The Board may provide such other audits as shall be desirable in the best interests of the Corporation.

ARTICLE X

Section 1. At the end of each fiscal year, such sums as the Board of Directors may fix shall be allocated to a reserve fund and to an educational fund. The reserve fund shall be for purposes of unforeseen losses, due to unusual depreciation of equipment, fire, theft, or other causes, for the extension of the Corporation as a cooperative, for any program of social welfare, or insurance, or other development directly associated with the benefit of the members of this Corporation, through the cooperative movement, as shall be decided by a general meeting of the members, or for such other purposes as the Board of Directors may determine.

Section 2. At the end of each fiscal year, after providing for the reserve fund, the educational fund, or such other funds as may hereafter be provided for in these by-laws, if any, the remainder of the net earnings shall be distributed among the patrons of this Corporation, whether members thereof or not, as a patronage refund in proportion to the value of purchases of goods and services from and sales to the Corporation made by each respectively during such fiscal year; provided, that any such patronage refund shall first be applied to any indebtedness of the patron to the Corporation, in which case the patron shall be notified in writing of the amount so applied.

ARTICLE XI

Section 1. At any regular meeting or at any special meeting called for such purpose, any provision of these By-Laws may be amended, altered, or repealed by the written assent of two-thirds (2/3) of the members of this Corporation. Notice of such meeting, including an accurate statement of the subject matter of the proposed amendment, shall be sent to the members at least ten (10) days prior to the meeting.

This is to certify that the foregoing By-Laws, consisting of twelve typewritten pages, were read and considered section by section at the first meeting of the Incorporators and Board of Directors of the Kinsey Farms, Inc., on this 18th day of January, 1939, and the said By-Laws were duly adopted as above set forth. Our assent thereto as all of the Members of said Corporation is also hereby indicated.

Clayton Carey, Secretary
Clayton Carey, Incorporator, Director, Member
Henry W. Zabel, Incorporator, Director, Member
Victor E. Edwards, Incorporator, Director, Member
James S. Fleming, Incorporator, Director, Member
Glen L. Brittenham, Incorporator, Director, Member

The management of the Project was through a Board of Directors elected from the membership of the Kinsey Farms, Inc. under the supervision of the Farm Security Administration. Farm units were leased from the Association by the tenants. The lease was on a share crop basis for five years, with the privilege of buying at the end of that period. Each unit was to pay its proportionate share of the operating expenses. During the time of development farm buildings were constructed on each unit, artesian wells drilled, water lines constructed, fences built, household drainage provided, and 6,984 acres of unit land were leveled for a total cost of \$101,606.93. This would give an average cost of \$14.54 per acre.

The fixed asset summary of Kinsey Farms, Inc. shows the following information. The bracketed figures represent the number of units of each type.

Houses	(81)	\$251,854.53
Barns	(78)	72,391.93
Poultry Houses	(79)	29,173.36
Garages	(71)	23,184.80
Hog Houses	(84)	9,441.86
Privies	(81)	1,375.62
Stock Sheds	(32)	2,583.08
Landscaping	(80)	2,435.72
Warehouse	(1)	6,684.98
Repair Shop	(1)	863.46
Fences		32,508.11
Wells and Water Supplies		45,272.69
Irrigation Structures and Canals		225,772.39
Land Leveling	(6984-A)	101,606.93

The irrigation system of Kinsey Farms, Inc. consisted of two pumping plants and canals and laterals with appurtenant structures. Water is furnished by this system to irrigate 6,240 acres of land. The number one pumping plant diverts water from the Yellowstone River in the SE $\frac{1}{4}$ of Section 25, Township 9 North, Range 47 East near the mouth of Sunday Creek. This plant consists of four electrically driven pumps, with a total capacity of approximately 134 cubic feet per second. The water is raised eight feet and discharged into the main canal. Of this amount of water, 57.92 cubic feet are delivered to the lower canal, which is 11.6 miles long and serves 2,850 acres. About 2.5 miles from the point of diversion is located Pump House No. 2, in which there are three electrically driven pumps. Two of these pumps have a combined capacity of 53.48 cubic feet and lift the water 28 feet to the middle canal, which is 9.2 miles long and serves 2,290 acres. The third pump has a capacity of 22.28 cubic feet and lifts water 56 feet to the High Line Canal, which is 7.7 miles long and serves 1,100 acres. The principal structures of the canal system are 32 timber bridges, 118 lineal feet of flume, and 1,910 lineal feet of syphons, together with turnouts, waste ways, concrete drops and culverts. Also incorporated in the system are 21.8 miles of laterals that carry the water from the three main canals to the farms they serve. The laterals are equipped with checks, turnouts, drops and culverts.

The appraised value of the above described irrigation system was placed at \$135,227.00.

The total cost of construction of the irrigation structures and canals is shown in the table to follow:

Types of Improvement	FSA Cost	WPA Contribution	Total Amount
Lower Canal	\$10,378.02	\$ 8,490.17	\$18,868.19
Middle Canal	8,213.46	3,802.12	12,015.58
Upper Canal	4,846.26	242.19	5,089.17
Laterals	10,814.22	3,883.78	14,698.00
Drainage	4,148.47		4,148.47
Rip Rapping	1,393.22		1,393.22
Pump House No. 1	5,416.84	7,508.05	12,924.89
Pump House No. 2	11,090.13	10,298.28	21,388.41
Transmission Line	18,148.02		18,148.02
Siphons	11,055.66	6,859.27	17,914.93
Misc. Structures	8,402.17	11,516.47	19,918.64
*Minor Structures	8,974.25	4,165.24	13,139.49
Bridges & Culverts	6,876.62	3,950.83	10,827.45
Pump Electric	27,033.69		27,033.69
Brush Dam	1,336.81	5,520.19	6,857.00
Total	\$138,127.84	\$66,237.31	\$204,365.15

*Note: Most of the item "Minor Structures" was structure in the farm laterals and head ditches.

In 1945 Kinsey Farms, Inc. spent \$21,407.24 on the irrigation system for the repair of flood damage, making the total investment on irrigation structures and canals \$225,772.39. All costs in connection with the irrigation system were advanced by the Farm Security Administration with the exception of the \$21,407.24. This amount was Kinsey Farms, Inc. funds.

By the spring of 1941, seventy-seven (77) families had been located on Kinsey Farm Units; some farmed their units in 1940, but for the majority the 1941 season was their first on the project.

Farm units were sold to individual purchasers after an outside independent appraisal was made by persons other than those working for the Farm Security Administration. These farms were sold to individuals on a deed note and mortgage basis with a 40 year repayment period at 3 percent interest. The purchase price of farms differed in each individual case—depending on the size of the unit. Seventy-five (75) farm units on the project are now in private ownership and are on the tax rolls of the County. During the period the land was in government ownership, the County was made payments in lieu of taxes on all land owned by the government. The roads, bridges, etc., were deeded to Custer County after the County Commissioners passed a resolution in regular session to accept the deed.

In May 1945 the Kinsey Irrigation Company was formed to acquire the irrigation system constructed by the F. S. A. The Articles of Incorporation to follow describe in detail the functions of the Corporation and its purpose.

ARTICLES OF INCORPORATION of KINSEY IRRIGATION COMPANY

KNOW ALL MEN BY THESE PRESENTS: That we, the undersigned have this day

voluntarily associated ourselves together to form a corporation pursuant to and under the provisions of the general corporation law of the State of Montana and certify that:

1. The name of this Corporation is KINSEY IRRIGATION COMPANY.
2. The purpose for which this Corporation is formed is to engage in and cooperatively exercise, not for profit, the following powers:
 - (a) To acquire by purchase, lease, exchange or any lawful method the irrigation system now serving the Kinsey Flats Project in Custer County, Montana, constructed by the Federal Government through the Farm Security Administration, United States Department of Agriculture, which includes a pumping plant located near the left (west) bank of the Yellowstone River in the Southeast quarter (SE $\frac{1}{4}$) of Section Twenty-five (25) Township nine (9) of Range forty-seven (47) E. M. M. and canals, ditches, laterals and other works as shown on the plat attached hereto and made a part hereof;
 - (b) To construct additions to or extensions of such irrigation system;
 - (c) To acquire and dispose of by any lawful method rights to the use of water for any beneficial purpose;
 - (d) To acquire and dispose of such real and personal property as may be necessary and convenient for the conduct and operation of the business of the corporation;
 - (e) To operate and maintain the irrigation system acquired by it for the irrigation of the lands within the Kinsey Flats Project;
 - (f) To acquire, hold, own, sell, transfer and pledge shares of the capital stock or bonds of any corporation or association engaged in any activity related to that authorized for this corporation or to become a member or stockholder in any such corporation or association;
 - (g) To make and perform contracts in connection with the accomplishment of the purposes of the corporation with any person or any agency, governmental or otherwise;
 - (h) To borrow from any federal or state agency or from any other source money, goods or services, and to pledge or mortgage any of its property as security therefore in any manner permitted by law;
 - (i) To extend credit to the members of the corporation in connection with its authorized activities;
 - (j) To levy assessments upon the members of the corporation for the purpose of performing the business of the corporation in such manner and in such amount as may be provided in the By-Laws of the corporation;
 - (k) To do any and all things necessary or desirable for the accomplishment of the purposes of the corporation which may lawfully be done by a corporation organized under the laws of the State of Montana.
3. The principal office of the Corporation will be located in the Town of Kinsey, Custer County, Montana.
4. This Corporation shall have perpetual existence.

5. The directors of the Corporation shall be seven (7) in number, and the names and residences of those appointed for the first three months and until their successors are elected and qualified are as follows:

NAME	ADDRESS
Richard Haun	Kinsey, Montana
Howard Viall	Kinsey, Montana
Clayton Carey	Kinsey, Montana
Henry Zabel	Kinsey, Montana
Albert Reinhardt	Kinsey, Montana
Mark Bender	Kinsey, Montana
Henry H. George	Kinsey, Montana

6. This Corporation shall not issue or cause to be issued capital stock of any kind whatsoever. Each member of the Corporation shall be entitled to one vote and only one vote in all corporate affairs.

7. Membership. Owners or lawful occupants of farm units of the Kinsey Flats Project shall be eligible for membership in the corporation, and membership shall be limited to such owners or lawful occupants. Only one membership shall be issued for each farm unit. Membership for units owned by the United States may be issued to lawful occupants for the term of such occupancy. Membership for units held in private ownership shall be issued only to the respective owners. Other conditions and limitations of membership, including, but not limited to, provision for transfer, termination, liability for and lien of assessments, inseparability from the land for which issued and form of membership certificate shall be such as may be provided in the By-Laws or any amendments thereof.

WITNESS OUR HANDS AND SEALS in duplicate this 7th day of May, 1945.

Richard Haun
Howard Viall
Clayton Carey
Henry Zabel
Albert Reinhardt
Mark Bender
Henry H. George

Soon after organization the Company entered into a Purchase and Loan Agreement with the United States Government. This agreement indicates that the Government sold the irrigation system to the Kinsey Irrigation Company for the sum of \$156,200.00. In addition to the irrigation system there was also sold chattel equipment necessary for the operation and maintenance of the irrigation system, and the water rights. The Company executed a note in the amount of \$156,200.00, and in turn the Government took a mortgage on the system and all chattel equipment connected therewith as security for the loan. The note given to the Government is to run for 40 years and is payable in annual installments of \$6,757.21. Complete details of the Purchase and Loan Agreements are contained herewith.

Purchase and Laan Agreement

AGREEMENT made and entered into this 3rd day of December, 1945, by the United States of America, hereinafter called the "Government," and Kinsey Irrigation Company, a corporation existing under the laws of the State of Montana, hereinafter called the "Company."

WITNESSETH: For and in consideration of the mutual covenants herein contained, the parties hereto agree as follows:

1. Subject to the terms and conditions of this agreement, the Government shall sell and the Company shall purchase, for a consideration of One Hundred Fifty-six Thousand, Two Hundred and No/100 Dollars (\$156,200.00), the irrigation system serving the farm units of the Kinsey Flats Project, more specifically described as follows:

The Kinsey Irrigation System serving the Kinsey Flats Project of the United States Department of Agriculture, including the following described items:

1. Electric transmission line, as now established and existing, with poles, wires and all appurtenant structures and fixtures approximately 4.22 miles in length, from its point of connection in the SW $\frac{1}{4}$ of Section 32, Township 9 North, Range 48 East of the Montana Principal Meridian with the transmission line of the Montana-Dakota Utilities Company, to the main project pumping plant No. 1 and to project pumping station No. 2.

2. (a) Personnel unit No. 4 containing 109.92 acres more or less, on which is located a house and pump house No. 1, pumping plant No. 1 includes the following items which are housed within it: One Peerless pump with 75 H. P. electric motor, one Pamona and one Fairbanks Morse pump each with 50 H. P. electric motor, one Peerless pump with 30 H. P. electric motor, together with starting switches, transformers, electrical wiring, piping, and appurtenant fittings.

(b) Pump house site No. 2 includes the following items which are housed within the pump house: One Fairbanks Morse pump with 150 H. P. electric motor and two Fairbanks Morse pumps each with 100 H. P. electric motors together with starting switches, transformers, electrical wiring, piping and appurtenant fittings.

(c) Unit No. 55 and Unit No. 81, all as shown on the plat of the Kinsey Flats Project which is of record in the office of the County Clerk and Recorder of Custer County, Montana.

3. The irrigation system ditches or canals as now located and existing, the general location and course of which are shown on the plat of the Kinsey Flats Project above referred to which is of record in the office of the County Clerk and Recorder of Custer County, Montana, such ditches or canals being as follows:

Lower Canal 11.6 miles in length with a capacity of 133.68 cubic feet per second of time at the head thereof which capacity decreased to 25 cubic feet per second of time at the lower end. The middle canal 9.2 miles in length with a capacity of 54 cubic feet per second of time at the head thereof which decreased to a capacity of 5 cubic feet per second of time at the lower end. The upper canal 7.7 miles in length with a capacity of 22 cubic feet per second of time at the head thereof which decreased to 5 cubic feet per second of time at the

lower end, together with rights of way for such canals 60 ft. wide, being 30 ft. on each side of the center line of each canal and an additional right of way across units numbered 32, 33, 54 and 55 of 40 ft., or a right of way 100 ft. wide being 50 ft. on each side of the center line of the canal crossing said units. The canal lengths and capacities indicated above are approximate figures. The following canal structures are included: 32 timber bridges, 13 concrete checks, 1,868 lineal feet of concrete culverts, 3 concrete drops, 78 lineal feet of metal flume, 7 siphons, 74 concrete turnouts and 4 wasteways.

4. All water rights acquired by the United States in connection with its acquisition of lands within the Kinsey Flats Project and all water rights owned by the United States and used in operation of the project including but not limited to the following specifically described water rights:

That certain water right described as follows: An appropriation made by the Buffalo Rapids Ditch Company on the 16th day of March, 1896, by which the appropriator claimed 3500 miners inches of the waters of said Yellowstone River in the County of Custer, State of Montana, which said water was claimed for irrigation for agricultural purposes and which said appropriation appears of record in the office of the County Clerk and Recorder of Custer County, Montana, in Water Right Records Volume "A", Page 285, and which said water right was subsequently conveyed by said Buffalo Rapids Ditch Company to the Buffalo Rapids Irrigation District and thereafter conveyed to the said Carl B. Calvin and by the said Carl B. Calvin and Ermina B. Calvin, his wife, to the United States of America.

That certain water right described as follows: An appropriation made by the Buffalo Rapids Irrigation District on or about the 10th day of February, 1915, by which the appropriator claimed 40,000 miner's inches of the waters of the Yellowstone River for developing water power and for irrigation of the lands included within the limits of the Buffalo Rapids Irrigation District, which said appropriation appears of record in the office of the County Clerk and Recorder of Custer County, Montana, being filed on the 18th day of February, 1915, in Book "F" of Water Rights at page 28, and which said water right was subsequently conveyed by said Buffalo Rapids Irrigation District to Carl B. Calvin and by Carl B. Calvin and Ermina B. Calvin, his wife, to the United States of America.

Subject, however, to existing rights of way for ditches and to such easements and rights of way upon, across, or through the above described lands as heretofore have been granted by the United States of America or its predecessors in title, and reserving to the United States of America three-fourths of the oil, gas, coal and other mineral rights of whatsoever nature upon, in or under the said lands, together with the usual mining rights, powers and privileges, including the right of access to and the use of such parts of the surface as may be necessary for mining and saving said minerals.

5. The following described personal property:

D-4 Caterpillar Diesel—Serial No. 7J4637W

LaPlant-Choat Hydraulic Dozer 8' blade—Model 4-RX Serial No. 4RX824
 RD-6 Caterpillar Diesel (1937) (FSA)—Motor No. 2H4316W
 Isaacson 6 cu. yd. Scraper (FSA) Serial No. 6063 W/power unit to fit
 RD6 Tractor page Automatic Bucket $\frac{3}{8}$ cu. yd. No. A396
 Austin Western (Badger $\frac{1}{2}$ cu. yd.) Shovel—Model 36 Motor No. PSU886
 Byers Diesel $\frac{1}{2}$ cu. yd. Dragline and Shovel—Model 60 Motor No. 4H9150
 $1\frac{1}{2}$ T. Dump Chevrolet Truck—Motor No. 2954750—Serial No.
 1WA123080
 $1\frac{1}{2}$ T. Ford Flat Rack (1933)—Motor No. BB18—3026276
 Chattin Ditcher Model 12 (FSA)—Model 12-34 Special—Serial No. 3413
 Martin Single Wing Ditcher—Model No. 40
 Towner Subsoiler—Model No. A26R—Serial No. 2767
 Air Compressor (Garage)—with gasoline motor
 $1\frac{1}{2}$ " Gorman Rupp Cent. Pump—Model Midget
 10 T. Bay City Trailer (FSA)—Model No. 158
 10' Hand Operated Galion Grader (1937) (FSA)—Model G14817A,
 Serial No. T2 245416
 $3\frac{1}{2}$ c. f. concrete mixer (FSA)—Kwick Mix—Serial No. 21216—Stover
 Motor $2\frac{1}{2}$ H. P.
 Chevrolet Station Wagon (FSA)—Serial No. 3KB12-7699—Motor No.
 3024798
 Hand tools, wheel barrows, misc. items.

2. Payment shall be made as provided in the promissory note in the form prescribed by the Government and shall bear interest at the rate of three per cent (3%) per annum.

The Company may at any time anticipate any payment required under such note and this agreement, and, upon repayment of any portion of the principal, interest shall cease on such portion of the principal, provided that any repayments shall first be applied to any accrued and unpaid interest.

3. The Company, as security for the payment of the purchase price of the irrigation system and for compliance with the provisions of this agreement, shall execute and deliver to the Government first mortgages covering the real and personal property comprising the said irrigation system, shall assign to the Government the assessments against the members of the Company, and shall execute such other instruments of security as the Government may from time to time require. Said mortgages and other instruments shall be in form and substance satisfactory to the Government.

If, in the opinion of the Government, the security pledged for the payment of the purchase price of the irrigation system be deemed at any time inadequate for the protection of the interests of the Government, the Company covenants that it shall deposit such further security and shall provide or adopt such other and additional methods of securing payment of the purchase price as the Government may demand.

The Company agrees that it will pay the cost of recording or filing of deeds and other conveyances, mortgages, assignments, liens, and other instruments of security and all renewals or extensions thereof required hereunder.

4. The Company agrees, as long as any portion of the purchase price remains unpaid:

(a) It will file with the Government such reports relative to its business and affairs as the Government may from time to time require, which reports shall be in such form as the Government shall approve.

(b) It will prepare and submit to the Government before the commencement of each fiscal year, an annual budget of income and expenses for the ensuing year and will operate in accordance with such budget as approved by the Government.

(c) It will not unless written permission be first secured from the Government (1) purchase the stock or other securities or become a member of any other corporation or association; (2) cause or permit any voluntary dissolution of its organization; (3) merge or consolidate with any other organization; (4) transfer its assets or any part thereof to any other organization in any manner whatsoever, except in the regular and usual course of its business.

(d) It will preserve and maintain its present provisions with respect to membership fees, eligibility and admission of members and participation of members in its affairs, management, and benefits, as set forth in its Articles of Incorporation and By-Laws, unless written permission to change such provisions be first obtained from the Government.

(e) It will continue to provide in its By-Laws that each member will have only one vote upon all matters upon which members are permitted to vote, and it will retain the present provisions of its By-Laws with respect to the limitations upon voting by proxy.

(f) It will keep all of its books and records in such form as the Government may prescribe or approve and at all times open to the inspection and examination of the Government and will permit copies thereof to be made by the Government.

(g) It will not borrow funds from any sources or for any purpose, nor contract any liabilities of any other kind, except current liabilities in the regular course of business, nor enter into any contracts other than in the regular course of business, nor extend credit in any amount, without the written approval of the Government.

(h) It will carry insurance on all of its property fully insuring the same against loss by fire and such other hazards as the Government may specify and adequate workmen's compensation, public liability, and such other types of insurance and such bond coverage on such of its officers and employees as the Government shall require or approve. The form and amounts of all such insurance and bonds and the insurers and sureties shall be approved by the Government.

(i) It will not purchase or lease any land, or contract for such purchase or lease, or enter into any contract for construction or for construction materials or equipment, except with the prior written approval of the Government.

(j) It will conduct and manage its affairs in accordance with such policies as the Government may from time to time prescribe and deem necessary for the protection of its interests hereunder.

(k) It will levy upon its members, in accordance with its Articles of Incorporation and By-Laws, assessments sufficient to pay the yearly cost of operation, maintenance, repair, improvements, taxes, interest and principal upon all obligations of the Company, especially the obligation to the Government as evidenced by the promissory note executed by the Company to the Government representing the purchase price of the irrigation system.

5. The entire balance of the purchase price shall be due and payable as provided in the note evidencing the obligation, or upon the happening of any one or more of the following events:

(a) If default be made by the Company in the payment of any installment of principal or interest payable in accordance with the provisions of such notes or of any other notes held by the Government.

(b) If the Company shall fail to perform any covenant, promise or agreement on its part to be performed, or if any representation made by it shall be found to be substantially inaccurate, or if any warranty made by it shall be breached.

(c) If any suit shall be instituted against the Company which, in the opinion of the Government, shall adversely affect the Government's interest hereunder, or if any judgment be recovered by any party against the Company, or there shall be instituted by or against it any bankruptcy, receivership, liquidation, insolvency, or like proceeding, or if any warrant of attachment shall be issued against any property of the Company,

6. The Company represents and warrants as follows:

(a) All authorizations necessary for the execution of this agreement by the Company have been secured.

(b) No fee or commission has been paid by the Company or any of its officers, agents, employees, or representatives, and no agreement to pay a fee or commission has been entered into by or on behalf of the Company or any of its officers, employees, agents, or representatives in order to obtain the conveyance of the irrigation system or to obtain the execution of this agreement.

(c) Every statement contained in this agreement and in every other document, statement, and certificate submitted to the Government by or on behalf of the Company is correct, and no relevant fact materially affecting the transaction has been omitted therefrom.

7. The Company shall not claim any modification, rescission, waiver release, or annulment of any part of this agreement, except pursuant to a written agreement signed by the Government, and the invalidity of any one or more phases, sentences, clauses, paragraphs or

provisions of this agreement shall not affect the remaining portions of this agreement or any portion thereof.

8. Except as herein provided, no right or remedy herein or in any note or mortgage or other security instrument conferred upon or reserved to the Government or any holder of such note or mortgage or other security instrument is intended to be exclusive, but shall be cumulative and shall be in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or by any statute. The pursuit of any right or remedy shall not be construed as an election.

9. All rights, privileges, benefits, options and powers conferred herein on the Government may be exercised on its behalf by the Secretary of Agriculture or his duly authorized representatives, or by the head of any other agency of the Federal Government that may from time to time be vested with authority over the subject matter of this agreement or his duly authorized representatives.

10. No member of or delegate to Congress or Resident Commissioner shall be admitted to any share or part of this agreement or to any benefit to arise thereupon, but this provision shall not be construed to extend to this agreement if made with a corporation for its general benefit.

11. This agreement shall be binding upon and to the benefit of the parties hereto and their respective successors and assigns.

IN WITNESS WHEREOF, the respective parties hereto have caused this agreement to be duly executed as of the day and year first above written.

UNITED STATES OF AMERICA
By /s/ Floyd F. Higbee
Regional Director

ATTEST: Henry H. George
Secretary
(Corporate Seal)

KINSEY IRRIGATION COMPANY
By /s/ Mat Mathison
President

Power for Kinsey Farms, Inc., and the Kinsey Irrigation Company was previously purchased from the Montana-Dakota Utilities Company. This contract was cancelled and the following contract entered into on July 24, 1946:

UNITED STATES DEPARTMENT OF THE INTERIOR, BUREAU OF RECLAMATION, FORT PECK PROJECT, MONTANA:—CONTRACT FOR ELECTRIC SERVICE TO KINSEY IRRIGATION COMPANY.

1. This Contract, made this 24th day of July, 1946, in pursuance of the Act of Congress approved May 18, 1938, (52 Stat. 403) and the Act of Congress approved May 26, 1926 (44 Stat. 657), and acts amendatory thereof or supplementary thereto, between THE UNITED STATES OF AMERICA, hereinafter called the United States, represented by the officer executing this contract, his duly appointed successor, or his duly authorized representative, hereinafter called the contracting officer, and KINSEY IRRIGATION COMPANY, a corporation, duly created, organized, and existing under and by virtue of the laws

of the State of Montana, hereinafter called the Contractor, its successors and assigns.

WITNESSETH:

2. Whereas, the Montana-Dakota Utilities Co., a Delaware corporation, has been furnishing electric service to the Contractor; and

3. Whereas, the Montana-Dakota Utilities Co. entered into a contract with the United States dated April 11, 1945, Symbol and No. 12r-15303, hereinafter called the Montana-Dakota contract, wherein, among the provisions thereof, it was provided that the United States, at its option, may enter into contracts for the sale of electric power and energy with any and all of the purchasers of electric power and energy from the Montana-Dakota Utilities Co. as said purchasers are set forth and described in Exhibit B of said Montana-Dakota contract; and

4. Whereas, the Contractor is one of the purchasers of electric power and energy from the Montana-Dakota Utilities Co. set forth and described in Exhibit B of said Montana-Dakota contract and is current with respect to its obligations with said company; and

5. Whereas, the Contractor is the owner of a substation and transmission lines serving the pumping plants of the Contractor; and

6. Whereas, the Contractor desires to obtain electric service from the United States and in order to facilitate the furnishing thereof is willing to lease its said substation and transmission lines to the United States for the period that said electric service is so furnished; and

7. Whereas, the United States is willing to furnish such electric service and to accept said lease of the Contractor's substation and transmission lines;

8. NOW, THEREFOR, in consideration of the mutual covenants herein set forth, the parties hereto agree as follows:

Facilities Leased to the United States

9. The Contractor hereby leases to the United States for the term of this contract the following facilities, hereinafter called the leased facilities:

(a) That certain 33/57/2.3 kilovolt substation as now constructed and located in the Southwest quarter (SW $\frac{1}{4}$) of Section nineteen (19), Township nine (9) North, Range forty-eight (48) East, Custer County, Montana, including all wire, fences, attachments, and electric equipment located therein or thereon, and any rights of way for ingress to and egress from said substation.

(b) That certain 3-wire, 3-phase, 33/57 kilovolt transmission line as now constructed and located in Custer County, Montana, beginning at the point of connection to the Montana-Dakota Utilities Co. 33/57 kilovolt transmission line in the Southwest quarter (SW $\frac{1}{4}$) of Section thirty-two (32), Township nine (9) North, Range forty-eight (48) East, Custer County, Montana, and extending thence in a northwesterly direction to the pump house as now located in the Southeast quarter (SE $\frac{1}{4}$) of Section twenty-five (25), Township nine (9) North, Range forty-seven (47) East, and extending thence in a northeasterly direction for a distance of one (1) mile more or less to the above described 33/57/2.3 kilovolt substation.

(c) That certain 3-wire, 3-phase, 2300 volt transmission line as now constructed and located in Custer County, Montana, beginning at the point of connection to the above-described 33/57/2.3 kilovolt substation, and extending thence in a northerly direction to the pump house as now located in the Northwest quarter (NW $\frac{1}{4}$) of Section eighteen (18), Township nine (9) North, Range forty-eight (48) East, Custer County, Montana.

(d) That certain 3-wire, 3-phase, 2300 volt transmission line as now constructed and located in Custer County, Montana, beginning at the point of connection to the above described 33/57/2.3 kilovolt substation, and extending thence in a southwesterly direction to the pump house as now located in the Southeast quarter (SE $\frac{1}{4}$) of Section twenty-five (25), Township nine (9) North, Range forty-seven (47) East, Custer County, Montana.

The United States will be responsible during the term hereof for the operation, maintenance, and repair of said leased facilities and upon the expiration or earlier termination of this contract the United States will return the leased facilities to the Contractor in as good condition as when received by the United States, reasonable wear and tear excepted. The United States shall have the right to serve other customers than the Contractor over said leased facilities and to sublease said leased facilities or any part or portion thereof or any part or portion of the capacity therein: Provided, that such service to others or such sublease of said leased facilities or capacity therein shall not interfere with the furnishing of electric service to the Contractor under the provisions of this contract,

Electric Service to Be Furnished

10. (a) The United States, under the terms and conditions stipulated herein, will furnish electric service to the Contractor for irrigation pumping and purposes incidental thereto only, from and after the date of initial service as hereinafter defined, at the point at which the 2300-volt circuit of the Contractor is attached to the structure of the substation herein leased to the United States. Said electric service will be furnished over facilities of the Montana-Dakota Utilities Co. under the terms and conditions provided in the Montana-Dakota contract, a copy of which is on file in the Regional Office of the Bureau of Reclamation, Billings, Montana:

Provided, That at the option of the United States service will be furnished over facilities of the United States if and when such method of service is deemed desirable.

(b) The electric energy involved hereunder will be delivered as three-phase, alternating current, at a nominal frequency of sixty (60) cycles per second, and at a nominal delivery voltage of 2300-volts, electric service will be furnished hereunder, in such amounts as may be required by the Contractor, only during the months of March to October, inclusive, hereinafter called service months; Provided, that, during months other than service months, the Contractor may, upon written notice to the contracting officer and subject to terms and conditions specified by him, use electric energy for testing and maintenance purposes. The transformers used in connection with electric service hereunder shall be de-energized during months other than service months, except for such periods when electric energy is being used for testing and maintenance purposes.

(c) Subject to the provisions of this Article, the electric service will be furnished continuously except (1) for interruptions or reductions due to uncontrollable forces, as herein defined; and (2) for temporary interruptions or reductions which, in the opinion of the contracting officer, are necessary or desirable for the purposes of maintenance, repairs, replacements, installation of equipment, or investigation and inspection: Provided, That the United States, except in case of emergency as determined by the contracting officer, will give the Contractor reasonable advance notice of such temporary interruptions or reductions and will remove the cause thereof with diligence.

Schedule of Rates

1. The Contractor shall pay for the electric service furnished hereunder at rates, charges, and upon conditions as follows:

- | | |
|----------------------------|---|
| (a) (1) Energy Charges: | \$0.0025 per kilowatt-hour for all energy used. |
| (2) Minimum Annual Charge: | \$2.75 per kilowatt of the maximum 30-minute integrated demand established during service months of each calendar year. |

(b) For service during a fractional part of a service months period at the beginning or end of service hereunder, the minimum charge shall be proportionately adjusted in the ratio that the number of hours that electric service is available to the Contractor in such fractional service months period bears to the total number of hours in the service months period.

(c) Should the delivery of electric energy be interrupted or reduced, because of conditions on the power system of the United States or the Montana-Dakota Utilities Co., below the rate

of delivery required by the Contractor at the time of such reduction, for a period or periods of one (1) hour or longer in duration each, the total number of hours of curtailed service in any service months period shall be determined by adding the sum of the number of hours of interrupted service to the product of the number of hours of reduced service multiplied by the percentage of said reduction below the rate of delivery required by the Contractor at the time of such reduction. The minimum charge shall be proportionately adjusted in the ratio that the total number of hours of such curtailed service as herein determined bears to the total number of hours in the service months period. The contractor shall make written claim, within thirty (30) days after receiving the November bill, for adjustment of the minimum charge on account of any curtailment to service, for a period or periods of one (1) hour or longer in duration each, alleged to have occurred and which is not reflected in such bill. Failure to make such written claim, within said thirty (30) day period, shall constitute a waiver thereof. All curtailments to service, for any reason whatsoever, which are due to conditions on the power system of the United States or the Montana-Dakota Utilities Co., shall be subject to the provisions of this section (c) and the Contractor shall be limited in its remedy therefor to the relief granted by this section (c).

Resale of Electric Energy

12. The Contractor shall not resell any of the electric energy delivered to it hereunder except with the consent of the Secretary of the Interior, and then only under terms and conditions approved by the Secretary.

Modification of Rates or Terms and Conditions of Service

13. Should the United States, during the term of this contract, modify the rates or the terms and conditions for furnishing electric service from the project, which modification or modifications but for the existence of this contract would be applicable to the furnishing of electric service to the Contractor as provided for hereunder, as conclusively determined by the contracting officer, it will promptly notify the Contractor thereof and electric services under this contract will be subject to such modified rates of terms and conditions from and after the date of said notice: Provided, That in the event of any such modification the Contractor may at its option, upon written notice to the United States, terminate this contract at any time within ninety (90) days after receipt of notice of such modification but not thereafter.

Billing and Payment

14. The United States will submit bills to the Contractor on or before the tenth day of each month for electric service furnished hereunder during the preceding month, and payments will be due and payable by the Contractor on the first day of the month immediately succeeding the date each bill is submitted. If the Contractor fails to pay any bill when due: (a) an interest charge of one percent (1%) of the amount unpaid shall be added thereto as liquidated damages, and thereafter, as further liquidated damages, an additional interest charge of one-half of one percent ($\frac{1}{2}\%$) of the principal sum unpaid shall be added on the first day of each succeeding calendar month until the amount due, including interest, is paid in full; and (b) the United States shall have the right to discontinue furnishing electric service to the Contractor,

only after fifteen (15) days' advance written notice of nonpayment of bills, and to refuse to resume same as long as any part of said amount due remains unpaid. Such a discontinuance of electric service will not relieve the Contractor of liability for the minimum charge during the time said electric service is so discontinued. If any of the meter tests provided for herein discloses that the error of any meter or meters exceeds two percent (2%), correction based upon the inaccuracy found shall be made of the records of electric service furnished since the beginning of the monthly billing period immediately preceeding the billing period during which the test was made: Provided, That no correction shall be made for a longer period than such inaccuracy may be determined to have existed. Any correction in billing resulting from such correction in meter records shall be made in the next monthly bill rendered by the United States to the Contractor, and such correction when made shall constitute full adjustment of any claim between the parties hereto arising out of such inaccuracy of meters. The rights given herein to the United States shall be in addition to all other remedies available to the United States, either at law or in equity, for the breach of any of the provisions hereof.

Measurement of Electric Power and Energy

15. The electric power and energy delivered hereunder to the Contractor will be measured at the low voltage side of the substation specified herein as the point of delivery by metering equipment to be furnished and maintained by the United States.

The meter or meters shall be sealed and the seals shall be broken only on occasions when the meter or meters are to be inspected, tested, or adjusted, and representatives of the Contractor shall be afforded reasonable opportunity to be present upon such occasions. The meter or meters shall be tested at least once each year and at any reasonable time upon request therefor by either party hereto. Any metering equipment found to be defective or inaccurate shall be repaired and readjusted or replaced. Should the meter or meters fail to register, the electric power and energy delivered hereunder during such period of failure to register shall, for billing purposes, be estimated from the best information available.

Construction, Operation and Maintenance of Contractor's Electrical Equipment

16. The Contractor shall construct, operate and maintain its electrical equipment in a condition satisfactory to the contracting officer. The United States may discontinue electric service hereunder if, after reasonable notice of an unsatisfactory condition, the Contractor fails or refuses to make such changes as may be required by the contracting officer. Such a discontinuance of electric service will not relieve the Contractor of liability for the minimum charge provided for herein during the time said electric service is so discontinued. The Contractor will hold harmless and indemnify the United States from and against any claims, demands, costs, losses, causes of action, damages, or liability of whatsoever kind or nature, arising out of or resulting from the construction or operation and maintenance of the Contractor's electrical equipment.

License to the United States

17. The Contractor, upon request from time to time by the contracting officer, will grant to the United States a license or licenses to construct, install, operate, maintain, replace, or repair,

either or all, upon such property of the Contractor, as in the determination of the contracting officer may be used or useful in that connection, such facilities as in the opinion of the contracting officer are necessary or desirable for the purposes of this contract. The license or licenses so granted shall be in form and of legal sufficiency acceptable to the contracting officer, shall be and remain in effect during the term of this contract, and shall expire coincidentally therewith. Any facilities so installed by the United States pursuant to said license or licenses shall be and remain the property of the United States notwithstanding that the same may have been affixed to the premises, and the United States shall have a reasonable time after the expiration of said license or licenses in which to remove its facilities so installed.

Power Factor

18. The Contractor shall maintain a power factor at the point of delivery of not less than ninety percent (90%) lagging; Provided, That the Contractor will be permitted to operate at a lower power factor when conditions are such, as determined by the contracting officer, that a lower power factor will not prevent the United States from making full use of its available generating and transmission facilities.

Term of Contract

19. (a) This contract shall become effective on the date that the Montana-Dakota Utilities Co. cancels its existing contracts with the Contractor herein, such cancellations to be made by the company in accordance with the provisions of the Montana-Dakota contract, and after this contract becomes effective it shall, subject to the provisions of Article 13 hereof, remain in effect until midnight of December 31, 1956.

(b) The date of initial service hereunder hereby is defined as the effective date of this contract.

Liability

20. The Contractor, its officers, agents, and employees, or any of them, shall not be liable for any claim for injuries or damages arising from the construction, operation, and maintenance of the facilities of the United States under this contract, unless such claim shall arise out of or result from their negligent act or acts. The United States, its officers, agents, and employees, or any of them, shall not be liable for any claims, demands, costs, losses, causes of action, damages, or liability of whatsoever kind or nature, arising out of or resulting from the construction, operation, and maintenance of the facilities of the Contractor under this contract.

Transfer of Interest in Contract

21. No voluntary transfer of this contract or of the rights of the Contractor hereunder shall be made without the written approval of the Secretary of the Interior, and any successor or assignee of the rights of the Contractor, whether by voluntary transfer, judicial sale, foreclosure sale, or otherwise, shall be subject to all the provisions and conditions of the Montana-Dakota contract and of this contract to the same extent as though such successor or assignee

were the original contractor hereunder: Provided, that the execution of a mortgage or trust deed, or judicial or foreclosure sales made thereunder, shall not be deemed voluntary transfers within the meaning of this Article.

Uncontrollable Forces

22. Neither party shall be considered to be in default in respect to any obligation hereunder, if prevented from fulfilling such obligation by reason of uncontrollable forces, the term uncontrollable forces being deemed for the purpose of this contract to mean any cause beyond the control of the party affected, including, but not limited to, inadequacy of water for the generation of the electric power and energy herein contracted for as conclusively determined by the Secretary, failure of facilities, flood, earthquake, storm, lightning, fire, epidemic, war, riot, civil disturbance, labor disturbance, sabotage, and restraint by court or public authority, which by exercise of due diligence and foresight such party could not reasonably have been expected to avoid. Either party rendered unable to fulfill any obligation by reason of uncontrollable forces, shall exercise due diligence to remove such inability with all reasonable dispatch.

Waivers

23. Any waiver at any time by either party hereto of its rights with respect to a default or any other matter arising in connection with this contract shall not be deemed to be a waiver with respect to any subsequent default or matter.

Notices

24. Any notice, demand or request required or authorized by this contract shall be deemed properly given if mailed, postage prepaid, to the Regional Director, Bureau of Reclamation, P. O. Box 2130, Billings, Montana on behalf of the United States, except where otherwise herein specifically provided, and to the President, Kinsey Irrigation Company, Kinsey, Montana, on behalf of the Contractor. The designation of the person to be notified or the address of such person may be changed at any time by similar notice.

Contingent Upon Appropriations

25. Where the operations of this contract extend beyond the current fiscal year, the contract is made contingent upon Congress making the necessary appropriation for expenditures hereunder after such current year shall have expired. In case such appropriation as may be necessary to carry out this contract is not made, the Contractor hereby releases the United States from all liability due to the failure of Congress to make such appropriation.

Officials Not to Benefit

26. No Member of or Delegate to Congress or Resident Commissioner shall be admitted to any share or part of this contract or to any benefit that may arise herefrom, but this restriction shall not be construed to extend to this contract if made with a corporation or company for its general benefit.

IN WITNESS WHEREOF, the parties hereto have caused this contract to be executed the day and year first above written.

THE UNITED STATES OF AMERICA

By /s/ H. W. Johnson
Acting Regional Director

(CORPORATE SEAL)

ATTEST: /s/ Henry H. George
Secretary

KINSEY IRRIGATION COMPANY

By /s/ Matt Mathison
President

The Kinsey Project is located on the north side of the Yellowstone River about 14 miles below Miles City in Custer County. It is served by the main line of the Chicago, Milwaukee, St. Paul and Pacific Railroad. The main shipping point is at Kinsey. Improved gravelled roads make Miles City the principal trading center available throughout the year.

The principal crops are sugar beets, alfalfa, wheat, barley, corn, oats and potatoes. Sheep, beef cattle, dairy cattle, hogs and poultry are raised on the project in considerable numbers. Sheep and cattle are also brought to the Project from adjacent ranges to be fed.

Seepage has not been a factor—having only occurred in small areas. In these areas drain ditches have been constructed or are being constructed. Water users report that the water supply is adequate during high water in the Yellowstone River if all pumps are operating, but that during low water they are sometimes short when all users are irrigating. To alleviate a water shortage users are placed on a water rotation basis until the situation is relieved.

In 1947 there were 6,205.10 acres being irrigated under the Kinsey Irrigation Company system, with a potential acreage under existing works of 779.50 acres, or a maximum irrigable acreage of 6,984.60 acres.

SECOND DIVISION, BUFFALO RAPIDS PROJECT

Shirley Unit

The Second Division, Buffalo Rapids Project, is located in eastern Montana. Three separate units: Shirley, Terry and Fallon comprise the Second Division.

The Shirley Unit is located in Prairie and Custer Counties, the southwesterly end being eighteen miles northeast of Miles City. From this location, Shirley Unit lands extend northeasterly along the southerly bank of the Yellowstone River a distance of thirteen miles.

The Second Division, Buffalo Rapids Project, is a Water Conservation and Utility Project, authorized under the "Great Plains Act" of August 11, 1939. An allocation of \$740,000 was approved by the President on May 15, 1940 from the Department of the Interior Appropriation Act of 1940. Of the \$740,000 allocated, \$515,000 was for use by the Bureau of Reclamation to construct the irrigation system. The remaining \$225,000 was for

use by the Department of Agriculture for development and settlement of the project. Under the President's approval of May 15, 1940, the amount allocated from the Department of the Interior Appropriation Act of 1940, \$740,000 was to be repaid by the water users. In addition to the above funds, a \$1,100,000 grant was to be provided by the Work Projects Administration. This grant was not to be repaid into the Federal Treasury.

Under this authorization and allocation of funds, construction of the irrigation system was begun in September, 1940. It soon became evident that W.P.A. would not furnish sufficient labor to accomplish the work. In January, 1942 a Civilian Conservation Corps camp at Terry, Montana was occupied. Under technical supervision of the Bureau of Reclamation, C.C.C. labor was also used for construction. The overall C.C.C. program was discontinued in July, 1942 and the camp at Terry was disbanded. The abandoned camp was occupied in January, 1943 by Civilian Public Service assignees. Under technical sponsorship of the Farm Security Administration a limited amount of C.P.S. labor was available for Bureau of Reclamation work. The W. P. A. program on the project was discontinued in January, 1943 and all W. P. A. help ceased entirely.

With the discontinuance of the W. P. A. program and consequent failure to realize the full amount of the anticipated W. P. A. contributions toward project construction, funds for completing irrigation features became inadequate. Some of the relief labor help anticipated from W. P. A. was made up by C. C. C. and C. P. S. contributions, but this help did not approach that scheduled for W. P. A. under the original Presidential authorization. On November 30, 1943 the President approved an additional allotment of \$706,000 from funds appropriated under the "Great Plains Act" of August 11, 1939, as amended with the stipulation that none of the additional funds were to be made available for construction of the Fallon Unit until the War Production Board had approved priorities for the critical materials needed. These funds were to be used in lieu of the W. P. A. contributions, which that agency had been unable to furnish. The application to W. P. B. for priorities for the Fallon Unit was refused. In order to complete the Shirley and Terry Units, \$200,000 of the \$706,000 allotment was made available to the project in April, 1944. With these funds and contributed C. P. S. labor, work on the project was continued on the Shirley and Terry Units during 1944 and 1945. In March, 1946 a teletype from the Commissioner advised that the Bureau of the Budget had informally approved an additional allocation of \$646,000 for construction of the Fallon Unit.

Development work on the project, consisting of land leveling and farm ditches, was started by the Farm Security Administration late in 1943. This work for the Shirley and Terry Units was completed during 1944 and 1945. Development work on the Fallon Unit, started in the spring of 1947 by the Soil Conservation Service, is to be completed in 1948.

Irrigable lands of the Second Division, Buffalo Rapids Project, total 11,600 acres. Of this total, the Shirley Unit contains 5,300 acres, the Terry Unit contains 2,800 acres and the Fallon Unit contains 3,500 acres.

The Shirley Pumping Plant is located on the Yellowstone River about 18 miles downstream from Miles City, Montana. At the present time two pumping units are installed, each having a capacity of 37 second feet when operating against a pumping head of 51 feet. Each pump is driven by a 250 horsepower, 2300 volt, synchronous electric motor. Power is supplied

by the Montana-Dakota Utilities Company from their 57,000 volt transmission line. A Bureau tap line .43 of a mile long connects the Company's transmission line to the Bureau substation at the pumping plant where transformers reduce the voltage to 2300 volts for pump operation, and to 110 to 220 volts for pumphouse lighting and incidental power. Water is pumped into the Shirley main canal through a triple barrel conduit 542 feet long. Each barrel of the discharge line is 3'0" in diameter. Construction of the Shirley Unit pumphouse required 24,140 cubic yards of excavation and backfill, 1,012 cubic yards of concrete and 159,649 pounds of reinforcing steel.

The Shirley main canal has a maximum section conforming to the following dimensions: base width 8.0 feet, total depth 6.5 feet, side slopes $1\frac{1}{2}$:1, water depth 4.0 feet. These dimensions permit a maximum flow of 105 second feet, which is the ultimate capacity designed for the irrigable lands of the Shirley Unit. The main canal is 13.5 miles in length and required 260,144 cubic yards of excavation and 7,574 cubic yards of compacted embankment. Eight siphons, varying in diameter from 5'0" to 2'6" and in length from 50 feet to 347 feet were constructed across natural surface runoff channels. Six of these siphons are of monolithic pipe construction and two are constructed of precast concrete pipe. Main canal siphon construction required 25,307 cubic yards of excavation and backfill, 1,454 cubic yards of concrete and 63,212 pounds of reinforcing steel.

Laterals, totaling 15.1 miles in length, were necessary to serve the 5,300 acres of irrigable land comprising the Shirley Unit. Excavation for these laterals amounted to 76,357 cubic yards. A total of 14 siphons were constructed as part of the lateral system with pipe diameters ranging from 42" to 24" and lengths ranging from 57 feet to 294 feet. Lateral siphons required 9,347 cubic yards of excavation and backfill, 170 cubic yards of concrete, 12,076 pounds of reinforcing steel and 1,340 lineal feet of precast concrete pipe. Lateral minor structures included the usual farm delivery turnouts, lateral turnouts, bridges, checks, drops and weirs. Feature quantities for these minor structures amounted to 7,098 cubic yards of excavation and backfill, 571 cubic yards of concrete, 40,971 pounds of reinforcing steel, 952 lineal feet of concrete pipe, 23 bridges and 36,075 pounds of miscellaneous metal work.

Provisions for the various methods of irrigation are incorporated in development operations by S.C.S. depending upon each individual field. The border dike system is established wherever fields, after leveling, have slopes less than 2.5 feet per 100 feet. Twenty-foot dikes are used where the ground slopes range between 1.25 and 2.5 feet per 100 foot; thirty-foot dikes are used where slopes range between .7 and 1.25 feet per 100 feet; forty-foot dikes are used where slopes range between .3 and .7 feet per 100 feet; and fifty-foot dikes are installed where slopes range between 0 and .3 feet per 100 feet. Contour ditches are installed on steeper slopes where the best use of water combined with erosion control are required.

Crops in 1947 consisted of hay, forage crops, grain and sugar beets. Most of the land on the project belong to the Department of Agriculture and was being developed by that agency. Very few farmers lived on the project during 1947.

Project settlement and development is under the direction of the Soil Conservation Service. These functions were transferred from the Farm Security Administration in June, 1946. Purchase of land for division into farm units was handled from a special fund allotted to the Department of Agriculture. A total of 21,172 acres were purchased by the F. S. A. at an average cost of \$4.76 per acre on the Second division.

A water users organization, called the Buffalo Rapids Irrigation District No. 2, was created in January, 1941. Ultimately, this organization will handle operation and maintenance on the Second Division. To date, (May 7, 1948) no contract has been executed between the United States and the District covering this function. As of 1947, no repayment contract had been executed by the Buffalo Rapids Irrigation District No. 2 for the Second Division. Consequently, no construction charges were levied against project irrigable lands.

A cooperative organization, called the Buffalo Rapids Farms Association, was organized in conformance with Section 6375, revised codes of Montana for 1935. Certificate of Incorporation was issued November 19, 1941. Under this Section the organization is not required to file Articles of Incorporation. Officers and board members for the Association are elected each year by the farmers on the project. It was organized to administer government owned land and to expedite work that government agencies are not authorized to perform. The Association also takes care of the operation and maintenance of the irrigation system, pumping plant, ditch riders, etc. All work performed by the Association is under government supervision. The S.C.S. is in charge of the project, approving the budget, leases, etc.

The Bureau of Reclamation charges the Association \$1.00 per acre-foot for water used. Leasees are charged \$2.00 per acre-foot by the Association. This additional charge is for operation and maintenance. Fifty percent of the profits made by the Association are turned over to the government under lease agreement. Any profits made from the balance are turned over to the members of the Buffalo Rapids Farms Association in the form of dividends. Some profits have been made.

BY-LAWS OF BUFFALO RAPIDS FARMS ASSOCIATION

ARTICLE I

Section 1. The name of this corporation is BUFFALO RAPIDS FARMS ASSOCIATION.

Section 2. The principal office of this corporation shall be located in the Town of Glendive, Dawson County, Montana.

ARTICLE II

Section 1. The seal of this corporation shall have inscribed the name of the corporation, the year of its organization, and the word "Montana," and shall be in the custody of the Secretary.

ARTICLE III

Section 1. The fiscal year of this corporation shall begin on the first day of January of each year.

ARTICLE IV

Section 1. The members of this corporation shall consist of the owners of the shares of its capital stock. Any person eighteen (18) years of age or over, engaged in agricultural

pursuits, who resides at or in the vicinity of the Buffalo Rapids Project of the Farm Security Administration, United States Department of Agriculture, in Prairie, Dawson and Custer Counties, Montana, and who is approved for membership by the Board of Directors of the corporation, shall be eligible to purchase a share of stock and to become a member of this corporation upon complying with the terms and conditions prescribed in these By-Laws; provided, however, that not more than one (1) person in each household may be admitted to membership.

Section 2. Application for membership shall be made on a stock subscription form prescribed by the Board of Directors. The application shall be accompanied by the sum of One Dollar (\$1.00) to be applied against the purchase price of one (1) share of stock. The shares of stock shall be sold at their par value of \$10.00. The balance of the purchase price may be paid upon acceptance of the application, or in deferred installments approved by the Board of Directors. Any promissory note given in payment or part payment of, or as evidence of a promise to pay for, capital stock of this corporation, shall have written or printed across the face thereof the words "Subscription note for one share of the capital stock of Buffalo Rapids Farms Association." If the application is not accepted, the deposit shall be returned to the applicant. Upon acceptance of the application, the Secretary shall issue to the new member a stock certificate, in the form prescribed by the Board of Directors, signed by the President and Secretary, shall enter the name of the new member upon the stock record book of the corporation, and shall present him with a copy of the By-Laws. The corporation shall have a lien upon the stock of each member for the payment of any sum due, or to become due, on any account whatsoever from the member to the corporation, and the form of stock certificate shall so provide.

Section 3. No assignment of stock shall be made to any person who already owns a share, and in no event except by the consent of a majority of the members, but stock may be assigned to the corporation at any time with the consent of the Directors. Upon the withdrawal, expulsion, removal from the Buffalo Rapids Project or its vicinity, or death of any member, the corporation shall have the option to purchase his share of stock at its book value or par value, whichever is lower. Neither the member nor his legal representative shall thereafter have any interest in the corporation, except to share, on the basis of the member's interest payments prior to such purchase of his stock, in subsequent distribution of net earned surplus, and to share in the retirement of retained patronage refunds, in accordance with the provisions of Article XI of these By-Laws.

Section 4. Any member who has failed to cooperate in the purposes and objects of this corporation, or has acted contrary to the best interests of the corporation, may be expelled by a majority vote of the members upon the recommendation of the Board of Directors, provided that such member is notified promptly, in writing, of the directors' recommendation and is given an opportunity to appear in his own defense before the next regular or special meeting of the corporation following the directors' meeting at which such recommendation shall have been made.

Section 5. Any member desiring to withdraw from the corporation may do so by depositing his stock certificate with the Secretary, to be dealt with in accordance with Section 3 hereof.

ARTICLE V

Section 1. Regular meetings of the members shall be held semi-annually on the third Monday in February and October of each year at such time and place as may be determined by the Board of Directors. The February meeting shall be known as the annual meeting. Notice of each meeting shall be given by the Secretary of the corporation at least ten (10) days prior to the date of said meeting, by mailing or delivering written notice thereof to each member of record at his address as it appears upon the records of the corporation. Such notice shall state the time, place of the meeting. (Amended 2-19-45.)

Section 2. Special meetings of the members may be called at any time by action of the Board of Directors, and such meetings must be called whenever a petition requesting such a meeting and stating the business to be brought up thereat is signed by at least ten percent (10%) of the members and presented to the Secretary or to the Board of Directors. Notice of such meetings shall be given by the Secretary in the manner provided in Section 1 of this Article. No business shall be transacted at any special meeting other than that specified in the notice thereof.

Section 3. A majority of the members of this corporation shall constitute a quorum for the transaction of business at any regular or special meeting. If a quorum shall not be present at any meeting, the members present shall have the power to adjourn the meeting from time to time without notice other than announcement at the meeting. At any such adjourned meeting at which a quorum shall be present, such business may be transacted as might have been transacted at the meeting as originally called.

Section 4. All meetings of the corporation shall be governed by Robert's "Rules of Order" (revised). The order of business at regular membership meetings shall include, as far as applicable:

1. Roll call.
2. Proof of due notice and determination of quorum.
3. Reading and disposal of any unapproved minutes.
4. Nominations for vacancies on the Board of Directors.
5. Report of Board of Directors by President, or Vice-President.
6. Report of Secretary.
7. Report of Treasurer.
8. Report of General Manager.
9. Report of Committees.
10. Unfinished business.
11. New business.
12. Elections.
13. Adjournment.

Section 5. Each member shall have one (1) vote and only one (1) vote on all matters. Voting in elections shall be by written ballot and voting on all other matters shall be by show of hands, unless ballot voting be requested by a majority of those present.

Section 6. At any regularly called general or special meeting of the members, a written vote received by mail from any absent member, and signed by him, may be read at such meeting and shall be equivalent to a vote of the member so signing; provided he has been previously notified in writing of the exact motion or resolution upon which such vote is taken, and a copy thereof is forwarded with and attached to the mailed vote.

ARTICLE VI

Section 1. The affairs of this corporation shall be managed by a board of seven directors, all of whom shall be members of the corporation. The directors shall be elected by the members at their annual meeting. For the purpose of election of directors, the Buffalo Rapids Project is hereby divided into six divisions, designated as (1) the Shirley Division; (2) the Terry division; (3) the Fallon Division; (4) the Bad Route Division; (5) the Clear Creek Division; and (6) the Sand Creek Division. The Shirley Division shall include the lands owned or controlled by the association or its stockholders lying west of a line extending north and south from the point where the Powder River enters the Yellowstone River. The Terry Division shall include the lands owned or controlled by the association or its stockholders lying between the east boundary of the Shirley Division as above located and a line extending north and south from the point of intersection of the main line of the Northern Pacific Railroad and the main line of the Chicago, Milwaukee & St. Paul Railroad. The Fallon Division shall include the lands owned or controlled by the association or its stockholders lying east of the east boundary of the Terry Division as above defined, south of the Yellowstone River and west of the section line dividing Sections 31 and 32, Township 13 North, Range 53 East extended southerly. The Bad Route Division shall include the lands owned or controlled by the association or its stockholders lying north of the Yellowstone River, east of the section line dividing Sections 23 and 24, Township 13 North, Range 52 East extended northerly from the river, and west of the range line dividing Township 14 North, Range 53 East and Township 14 North, Range 54 East. The Clear Creek Division shall include the lands owned or controlled by the association or its stockholders lying east of the east boundary of the Bad Route Division as above fixed and west of the line dividing Township 15 North, Range 54 East and Township 15 North, Range 55 East. The Sand Creek Division shall include the lands owned or controlled by the association or its stockholders lying east of the east boundary of the Clear Creek Division. The boundaries of these divisions may be revised from time to time by members of the corporation, upon the recommendation of the Board of Directors, for the purpose of maintaining approximate equality among the districts as to population by members of the corporation. The Board of Directors shall at all times include at least one resident of each division. The term of office of each director shall be one year or until his successor is elected and qualified.

Section 2. The officers of this corporation shall be a President, Vice-President, Secretary, and a Treasurer, all of whom shall be elected by the members of the corporation at their annual meeting. The President and Vice-President shall be elected from among the members of the Board of Directors; the Secretary and Treasurer need not be directors or members of the corporation. Their term of office shall be one (1) year and until their successors

are duly elected and qualified. In addition to these officers, the Board of Directors shall contract for the services of a manager or general manager, and shall fix his compensation and other terms and conditions of employment. The manager or general manager shall not be a member of the Board. The Board may appoint and remove such other officers, attorneys, and agents as it may deem necessary to carry on the business of the corporation. Such appointees need not be members of this corporation, and shall not be directors or members of their families.

Section 3. Any director officer shall vacate his office if he receives or obtains any direct personal gain or advantage arising from business dealings of this corporation with an individual, firm or corporation, differing in any way from the dealings which this corporation has with all its members, or if he competes in any way with the business of this corporation on his private account.

Section 4. Regular meetings of the Board of Directors shall be held at such time and place, and at such regular intervals, not exceeding three months, as may be designated by resolution adopted from time to time by the Board. Special meetings of the Board may be called by the President, Vice-President, or by any two members of the Board. Notice of all regular and special meetings of the Board shall be given to each Director by the Secretary of the corporation by mailing or delivering to him at his last known post office address, at least five (5) days prior to the date fixed for such meeting, a notice setting forth the time and place and in case of a Special Meeting, the notice shall also set forth the purpose thereof. Four (4) Directors shall constitute a quorum.

At any meeting at which every member of the Board shall be present, although held without notice, any business may be transacted which might have been transacted if notice of such meeting had been duly given.

Section 5. The Board of Directors shall have general power to act for the corporation in the administration and management of its affairs.

Section 6. The Board of Directors may, by resolution or resolutions, passed by a majority of the whole Board designate one or more committees which shall function in an advisory capacity, and shall report to the Board of Directors, but such committees shall not exercise any of the powers of the Board.

Section 7. Vacancies in the Board of Directors shall be filled by the members at their next regular meeting. Vacancies in any office shall be filled by the Board of Directors until the next regular meeting of the members, at which time the members shall fill the vacancy for the unexpired term.

Section 8. Any director may be removed from office by a vote of two thirds of all of the members of the corporation, at any regular or special meeting held after due notice of the proposed removal shall have been given to the members and to the Director whose removal is sought. The Director shall have an opportunity at such meeting to be heard in person or by counsel and to present witnesses.

Section 9. The Directors, the President and the Vice President shall serve without compensation; the Board of Directors may provide for the payment to the Secretary and Treasurer of a reasonable sum, for the time actually spent by them on the business of the corporation and for any expense incurred thereby; the Board of Directors may authorize payment to the members thereof, and to the officers of the corporation, for travel incurred in connection with the business of said corporation, at a rate not to exceed $4\frac{1}{2}$ c per mile, and may also authorize a payment to such members and officers, per diem at a rate not to exceed \$4.00 per day, for time actually spent in connection with the business of the corporation.

ARTICLE VII

Section 1. The principal duties of the President shall be to preside at all meetings of the Board of Directors and the members, to execute all instruments on behalf of this corporation, to have general supervision of the affairs of this corporation, and to perform such additional or different duties as shall, from time to time, be imposed or required by the Board of Directors.

Section 2. The principal duties of the Vice President shall be to discharge the duties of the President in the event of the absence or disability of the latter for any cause whatever.

Section 3. The principal duties of the Secretary shall be to countersign all instruments executed by this corporation, affix the seal of this corporation thereto and to such other papers as shall be required or directed to be sealed, to keep a record of the proceedings of the Board of Directors and of the members and of all committees, to keep all books, papers, records and documents belonging to this corporation or in anywise pertaining to the business thereof, and to perform such additional or different duties as shall, from time to time, be imposed or required by the Board of Directors.

Section 4. The principal duties of the Treasurer shall be to keep and account for all moneys, credits, and property of any and every nature of this corporation which shall come into his hands, to keep an accurate account of all moneys received and disbursed and proper vouchers for moneys disbursed, to render such accounts, statements, and inventories of moneys received and disbursed, and of money and property on hand, and generally of all matters pertaining to this office as shall be required by the Board of Directors, and to perform such additional or different duties as shall, from time to time, be imposed or required by the Board of Directors.

Section 5. The duties of the manager or general manager shall be; (a) to have charge of the direct management of the corporation's business in accordance with the instructions of the Board of Directors and under supervision of the Board; (b) to engage and discharge the employees of the corporation subordinate to him in accordance with the authority given by the Board of Directors; (c) to cause accurate books to be kept of the business of the corporation and to submit the same, together with all files, records, inventories and other information pertaining thereto for inspection at any time by the Board of Directors or by auditors appointed by the board; (d) to give aid, advice and recommendations to

the Board in the preparations of budgets and to furnish to the Board once a month a statement in writing of the condition of the corporation's business and submit a report of the management at the regular meeting of the members; (e) to assist the Board in formulating policies and to attend to such other duties and offices as the Board of Directors may require.

ARTICLE VIII

Section 1. The Board of Directors shall present at each semi-annual meeting and when called for by vote of the members at any special meeting, a full and clear statement of the business and condition of the corporation.

Section 2. At the close of each fiscal year, the Board of Directors shall provide for an annual audit of the accounts of the corporation by a public accountant having no connection with the corporation, the audit to be conducted in accordance with generally accepted auditing procedure. This audit shall include narrative statements of services rendered by the corporation, the balance sheet, profit and loss statements, members admitted and withdrawn, total number of members, and other proper information, and it shall be submitted in written form to the members at the annual meeting in February, or as soon thereafter as practicable. The Board may provide such other audits as shall be desirable in the best interests of the corporation.

Section 3. The Treasurer, Manager, and other officers or employees, having the custody of funds or goods of the corporation, shall each give or execute a fidelity bond in favor of the corporation, in such sum and with such surety or sureties as shall be satisfactory to the Board of Directors.

ARTICLE IX

Section 1. The corporation shall, insofar as it is engaged in the cooperative production of goods or performance of services which are to be sold in competition with the goods or services of private enterprises, maintain labor standards of wages, hours and conditions of employment in its several occupations at least equivalent to those that prevail for similar occupations in the private enterprises with which it is in direct competition.

Section 2. The corporation shall not employ any person whose age or physical condition is such as to make his employment dangerous to his health or safety or to the health and safety of others.

Section 3. The corporation shall at all times recognize and respect the right of its employees, whether members or non-members, to organize and bargain collectively through representatives of their own choosing, free from the interference, restraint, or coercion of the corporation or any of its officers or directors.

ARTICLE X

Section 1. Subject to the provisions of any agreement between this corporation and the United States Government, the Board of Directors shall fix the extent to which credit may be given or taken in the business transactions of this corporation.

ARTICLE XI

Section 1. At the end of each fiscal year, the Board of Directors shall cause to be computed the net earned surplus of the corporation after deducting any accumulated deficits at the end of the preceding fiscal year. Such net earned surplus shall then be apportioned by the Board of Directors as follows:

(a) On common stock there shall be declared and paid a dividend of not exceeding six per cent (6%) per annum on the par value thereof.

(b) From the balance remaining, if any, not less than five percent (5%) of the net earned surplus shall be set aside in a reserve fund until an amount has been accumulated in said reserve fund amounting to thirty per cent (30%) of the paid up stock.

(c) From the balance remaining, if any, five per cent (5%) of the net earned surplus shall be set aside in an educational fund for use in teaching cooperation.

The Board of Directors shall then allocate from the residue of the net earned surplus to each profitable enterprise ("profitable enterprise" as used herein shall include any combination of profitable enterprises considered as a unit) that portion of the net earned surplus of the Corporation which the net earned surplus of each profitable enterprise bears to the net earned surplus of all profitable enterprises. Amounts so allocated to any leasing enterprise shall then be distributed by the Board of Directors on the books of the Corporation as a retained refund to the credit of each individual patron in such proportion as the rent charged by said enterprise to each patron bears to the amount of rent charged by the enterprise to all patrons. Amounts so allocated to any consumer or service enterprise shall be distributed by the Board of Directors on the books of the Corporation as a retained refund to the credit of each individual patron of said enterprise in such proportion as the amount of his purchases of goods and services from and sales to the Corporation bears to the total amount of all purchases of goods and services from and sales to the Corporation through said enterprise. Amounts so allocated to produce enterprises shall be distributed by the Board of Directors on the books of the Corporation as a retained refund to the credit of each individual patron in such proportion as the number of hours of labor performed by each patron for said enterprise bears to the total number of hours of labor performed by all patrons for said enterprise.

Section 2. After the net earned surplus has been computed and distributed in accordance with Section 1, hereof, the Board of Directors shall determine the total amount of cash that will be needed by the Corporation for the ensuing fiscal year for the following purposes:

(a) more efficient operation of the Corporation, (b) repayment of principal on indebted-

ness, (c) expansion of facilities, (d) replacement of fixed assets, (e) providing operating capital, (f) cooperative education, (g) welfare program of the members, (h) for unforeseen losses, and (i) contingencies and for other purposes. The Board of Directors shall then determine the amount of cash available for payment in retirement of retained refunds, and shall pay such amount to the patrons as soon after the end of the fiscal year as is practicable. The Board of Directors may retire all or any part of the refunds retained for the fiscal year just ended or all or any part of the refunds which were retained in previous years; provided, however, that if the Board of Directors shall determine to retire refunds which were retained in previous years, payment shall be made in the order of annual retention. The repayment to each patron for any particular year shall be made in that proportion which the total amount of his retained refunds for that year bears to the total amount of retained refunds for that year. Any payment made in accordance with this paragraph shall first be applied in liquidation of any indebtedness of the patron to the Corporation in which case the patron shall be notified in writing of the amount so applied.

Section 3. In the event a membership is terminated, for any reason, during a fiscal year, at the end of which the Corporation has a net deficit from operations, such member's proportionate share of such deficit shall be determined by the Board of Directors in the same manner as refunds are calculated, as provided in Section 1, and shall be deducted from his share of retained refunds provided that such member shall not be charged for an amount in excess of the amount credited to his account for retained refunds, and provided, further that such proportionate share of such deficit shall be deducted from his retained refunds inversely to the order of retention.

Section 4. The sums credited to a patron's account for retained refunds shall not be assignable, except with the written consent of the Board of Directors, shall not bear interest, and, in the event of dissolution of the Corporation, after the payment of all debts of the Corporation shall be paid to each patron that proportion which they bear to the total amount of all sums credited to all patrons for retained refunds, without regard to their order of retention: provided, that after all retained refunds have been paid to the patrons, any remaining assets shall be used (a) to repay amounts paid in for stock certificates, and (b) for distribution to the patrons in the proportion provided in this section.

ARTICLE XII

Section 1. At any regular meeting or at any special meeting of the members of this Corporation called for such purpose, any provision of these By-Laws may be amended or repealed by a vote of two-thirds of the members. Notice of such meeting, including an accurate statement of the subject matter of the proposed amendment, shall be sent to the members at least ten (10) days prior to the meeting.

Cost of O. & M. per irrigated acre for Buffalo Rapids, Second Division, is shown on the following table:

Item	Year			
	1944	1945	1946	1947
Acre-feet of water delivered to farms.....	354.3	3,299	7,919	7,969
Acre-feet delivered per acre irrigated.....	.29	.68	1.27	1.25
Acreage irrigated.....	1,040.5	4,886	6,235	6,378
Number of farms irrigated.....	13	52	67	68
Cost of O. & M. per acre irrigated.....	\$2.89	2.59	3.02	9.47

For the Terry plant, 1945 was the first year of operation and the second for the Shirley plant. Both plants were in operation in 1947. All water delivered during 1947 was delivered under "Operation and Maintenance during Construction." This provided O. & M. during construction period, which will go into the construction debt and will possibly be classified as a non-reimbursable cost. The high O. & M. cost for 1947 was the result of pumping plant break down. Operation and maintenance cost for 1948 has been estimated to be about \$3.00 per irrigated acre. With the exception of pumping water for the purpose of priming and puddling into the new canals and laterals, the Fallon Unit was not in operation in 1947 and is not expected to be in operation for the 1948 season because installations will not be completed until fall.

Water Right Filings on the Buffalo Rapids Project in Custer, Prairie & Dawson Counties

A water right filing was made by Paul A. Jones, Construction Engineer of the Buffalo Rapids Project acting in behalf of the United States of America, for 1,340 cubic feet per second of the waters of the Yellowstone River and tributaries. Notice was posted June 17, 1938 and the filing was recorded in the Custer County courthouse in Bin 132 of Water Right Records, June 21, 1938.

The United States of America, named as appropriator, filed an identical notice of appropriation, except that the date of filing was June 11, 1940. This filing is recorded in Book F, Page 134 of Water Right Records in the Custer County courthouse.

Paul A. Jones, acting in behalf of the United States of America, filed on 1,340 cubic feet per second of the waters of the Yellowstone River and tributaries in Prairie County, June 3, 1940, with the date of posting given as June 17, 1938. This notice of appropriation is recorded in Book 1 of Water Right Records in the Prairie County courthouse.

The United States of America, on June 5, 1940 filed on 1,340 cubic feet per second of the waters of the Yellowstone River, with the date of posting given as June 17, 1938. This notice of appropriation is recorded in Book D-4, Page 401 of Water Right Locations in the Dawson County courthouse.

The data to follow is applicatory to the above appropriations:

That the places of intended use are within the following described areas lying along or adjacent to the Yellowstone River in the counties of Custer, Prairie and Dawson:

Area No. 1

Area No. 1, or the Shirley Division, consists of the land along the east side of the Yellowstone River extending from a point opposite Harris Creek to Powder River. It contains about 5300 acres of arable land, located within the following sections: Sections 1, 2, 3, 4, 9, 10, 11, 15, 16, 20, 21, 22, 28, 29, 32 and 33, T. 10 N., R. 49 E., M. P. M., all in Custer County; and Sections 8, 9, 10, 16, 17, 18, 19, 20, 21, 29, 30, and

31, T. 11N., R. 50E., M. P. M., and sections 25 and 36, T. 11N., R. 49E., M. P. M. all in Prairie County. The diversion point for Area No. 1, or the Shirley Division, is on the east side of the Yellowstone River about $1\frac{1}{2}$ miles above the station of Shirley on the N. P. Ry. in the NE $\frac{1}{4}$ of Sec. 6 T. 9N., R. 49E., M. P. M.

The diversion for the area will be effected by a pumping plant with a capacity of 150 second feet, with a discharge pipe of 68 inches diameter.

Area No. 2

Area No. 2, or the Saugus-Calypso Division, consists of the land along the west side of the Yellowstone River, surrounding the stations of Saugus and Calypso on the C. M. & St. P. Ry., and contains about 2600 acres of arable land located in the following sections: Sections 21, 22, 26, 27, 28, 32 and 33, T. 12N., R. 50E., M. P. M.; Sections 4, 5, 8, 9, 17, 18, 19 and 30, T. 11N., R. 50E., M. P. M.; and Sections 24, 25, 26, 35 and 36, T. 11N., R. 49E., M. P. M.; all in Prairie County.

The diversion point for Area No. 2, or the Saugus-Calypso Division, is on the west side of the Yellowstone River, about 3 miles above the station of Saugus, on the C. M. & St. P. Ry., and is located in the SW $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Section 35, T. 11N., R. 49E., M. P. M.

The diversion for the area will be effected by a pumping plant with a capacity of 70 second feet, with a discharge pipe of 48 inches diameter.

Area No. 3

Area No. 3, or the Terry-Fallon Division, consists of the land along the east side of the Yellowstone River surrounding the towns of Terry and Fallon, and contains about 10,900 acres of arable land located in the following sections: Section 31, T. 13N., R. 53E., M. P. M.; Sections 25, 26, 27, 28, 33, 34, 35 and 36, T. 13 N., R. 52E., M. P. M.; Sections 5 and 6, T. 12N., R. 53E., M. P. M.; Sections 1, 2, 3, 4, 7, 8, 9, 10, 11 and 18, T. 12N., R. 52E., M. P. M.; Sections 8, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 26, 27, 28, 29 and 30, T. 12N., R., 51E., M. P. M.; Sections 13, 14, 15, 22, 23, 24, 26, 27, 28, 33 and 34, T. 12N., R. 50E., M. P. M. and Sections 3 and 4, T. 11N., R. 50E., M. P. M., all in Prairie County.

The diversion point for Area No. 3, or the Terry-Fallon Division, is on the east side of the Yellowstone River about 3 miles west of the City of Terry, Montana, and is located in the NE $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Section 13, T. 12N., R. 50E., M. P. M.

The diversion for this area will be effected by a pumping plant with a capacity of 300 second feet, with a discharge pipe of 96 inches diameter, or its equivalent in two smaller diameters.

Area No. 4

Area No. 4, or the Haley Division, consists of the land on the west side of the Yellowstone River between Terry and Fallon, and contains about 3600 acres of arable land, located

within the following sections: Sections 28, 29, 30, 31, 32 and 33, T. 13N., R. 52E., M. P. M.; Sections 35 and 36, T. 13N., R. 51E., M. P. M.; Sections 3, 4, 5, 6, 7 and 8, T. 12N., R. 52E., M. P. M. and Sections 1, 2, 11 and 12, T. 12N., R. 51E., all in Prairie County.

The diversion for Area No. 4, or the Haley Division, is on the west side of the Yellowstone River, about one mile east and one mile north of Terry, and immediately downstream from the burning coal mine. It is located in the NW $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Section 11, T. 12N., R. 51E., M. P. M.

The diversion for this area will be effected by a pumping plant with a capacity of 100 second feet, and a discharge pipe with a diameter of 56 inches.

Area No. 5

Area No. 5, or the Glendive Division, has been organized as the Buffalo Rapids Irrigation District No. 1 and is now under construction, (June 3, 1940). It consists of the land on the Glendive bench along the west side of the Yellowstone River between Fallon and Glendive, but does not include the land in the old Glendive-Fallon Irrigation District. It contains about 17,000 acres of arable land within the following sections: Sections 17, 18, 19, 20 and 30, T. 13N., R. 53E., M. P. M.; and Sections 24, 25, 26 and 27, T. 13N., R. 52E., M. P. M.; all in Prairie County; Sections 22, 23, 26, 27, 28, 33, 34, 35, T. 16N., R. 55E., M. P. M.; Sections 3, 4, 5, 8, 9, 16, 17, 18, 19, 20, 21, 28, 29, 30, 31 and 32, T. 15N., R. 55E., M. P. M.; Sections 24, 25, 35 and 36, T. 15N., R. 54E., M. P. M.; Sections 5, 6, 7, 8, 17, 18 and 19, T. 14N., R. 55E. M. P. M.; Sections 1, 2, 10, 11, 12, 13, 14, 15, 20, 21, 22, 23, 24, 26, 27, 28, 29, 30, 31, 32, 33 and 34, T. 14N., R. 54E., M. P. M.; Sections 4 and 5, T. 13N., R. 54E., M. P. M.; and Sections 1, 2, 3, 8, 9, 10, 11 and 16 T. 13N., R. 53E., M. P. M.; all in Dawson County.

The diversion for Area No. 5, or the Glendive Division, is on the west side of the Yellowstone River about one mile north of the Fallon bridge. It is located in the SE $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 25, T. 13N., R. 52E., M. P. M.

The diversion for this area will be effected by a pumping plant, with a capacity of 460 second feet and a discharge pipe of 84 inches diameter.

Area No. 6

Area No. 6, or the Marsh Division, consists of the land along the east side of the Yellowstone River and adjacent to the towns of Marsh and Hoyt, and contains about 1500 acres of irrigable land within the following sections: Sections 25, 26, 27, 34, 35 and 36, T. 14N., R. 54E., M. P. M.; Sections 3, 4, 5, 6, 7, 8, 9, and 18, T. 13N., R. 54E., M. P. M.; and Section 13, T. 13N., R. 53E., M. P. M.; all in Dawson County.

The diversion for Area No. 6, or the Marsh Division, is on the east side of the Yellowstone River about one-half mile above the town of Marsh on the Northern Pacific Railway. It is located in the NE $\frac{1}{4}$ of the NE $\frac{1}{4}$ of Section 13, T. 13N., R. 53E., M. P. M.

The diversion for this area will be effected by a pumping plant with a capacity of 40 second feet, with a discharge pipe of 36 inches diameter.

Area No. 7

Area No. 7, or the Colgate Division, consists of the land on the east side of the Yellowstone River which surrounds the station of Colgate on the Northern Pacific Railway, and contains about 1500 acres of arable land located within the following sections: Sections 21, 22, 27, 28, 29, 32, 33 and 34, T. 15N., R. 55E., M. P. M.; and Sections 4 and 5, T. 14N., R. 55E., M. P. M.; all in Dawson County.

The diversion point for Area No. 7, or the Colgate Division, is on the east side of the Yellowstone River about one and one-half miles above the station of Colgate on the Northern Pacific Railway. It is located in the SW $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Section 4, T. 14N., R. 55E., M. P. M.

The diversion for this area will be effected by a pumping plant with a capacity of 40 second feet and a discharge pipe of 36 inches diameter.

Area No. 8

Area No. 8, or the Stipek Division, consists of the land along the west side of the Yellowstone River between Glendive and Morgan Creek, and contains about 6700 acres of irrigable land within the following sections: Section 31, T. 18N., R. 56E., M. P. M.; Sections 6, 7 and 18, T. 17N., R. 56E., M. P. M.; Sections 1, 11, 12, 13, 14, 22, 23, 24, 25, 26, 27, 33, 34, 35 and 36, T. 17N., R. 55E., M. P. M.; Sections 5, 6, 7 and 8, T. 16N., R. 56E., M. P. M.; and Sections 1, 2, 11, 12, 13 and 14, T. 16N., R. 55E., M. P. M.; all in Dawson County.

The diversion point for Area No. 8, or the Stipek Division, is on the west side of the Yellowstone River about two miles north of the City of Glendive, Montana. It is located in the NE $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Section 23, T. 16N., R. 55E., M. P. M.

The diversion for this area will be effected by a pumping plant with a capacity of 180 second feet, and a discharge pipe of 72 inches diameter.

According to Bureau of Reclamation engineers, Area 2 (Saugus-Calypso), Area 4 (Haley), Area 6, (Marsh), Area 7, (Colgate) and Area 8 (Stipek), as of May 13, 1948 are in investigation stages with no development work accomplished.

In 1947 there were 2,797.83 acres being irrigated under the Buffalo Rapids Project, Shirley Unit, Second Division, in Custer County, with a potential acreage under existing facilities of 409.00 acres, or a maximum irrigable acreage of 3,206.83. These figures are both government and private owned land.

SHEFFIELD RANCH COMPANY PROJECT

On August 21, 1919, A. J. Cumming and B. B. Sheffield filed a notice of appropriation for 1,000 miner's inches of water to be diverted from the Yellowstone River in Book F, Page 88 of Water Right Records in the Custer County courthouse. The point of diversion was described as a place where the section line between Sections 27 and 28, in Township 7 North, Range 45 East, intersects with the north bank of said river.

The purpose was for irrigation, watering livestock, domestic use, and for developing power and all other purposes. The system was described as a pump, or pumps, or other means of elevating said water from said river into the ditch or flume, to be constructed of sufficient size and capacity to elevate and conduct said water from said river. From this point there was to be a ditch or ditches leading onto the said lands; said ditch to be about 8 feet in width and about $1\frac{1}{2}$ feet in depth. The land description of intended place of use was described as all land south of the Chicago-Milwaukee Railroad right-of-way in Section 21, containing 200.50 acres, a part of the $W\frac{1}{2}$ of Section 22, containing 332.33 acres, lots 2, 3 and 6, and the $W\frac{1}{2}NW\frac{1}{4}$ of Section 27, containing 226.12 acres, and all of fractional Section 28, all in Township 7 North, Range 45 East. The date appropriated was given as August 14, 1919.

On May 28, 1925 B. B. Sheffield filed on 2,000 miner's inches of water to be diverted from the Yellowstone River at a point 1,100 feet, south 32 degrees and 30 minutes east of the center of Section 28, Township 7 North, Range 45 East on the north bank of the river. The date appropriated was given as May 27, 1925.

The purpose was for irrigation, power, watering livestock, domestic and other purposes, including the sale of water for irrigation purposes. The system was described as a pump, or pumps, or other means of elevating said water from said river into the irrigation system. From the point of diversion there will be a pipe 36 inches in diameter and a main canal 7 feet wide on the bottom and 3 feet deep leading onto the said lands or premises and other lands. There will also be such necessary pipe, flumes, canals, etc., carrying and conducting the said water onto the said lands as the soil and country may require. The land description of intended place of use was described as, the $SW\frac{1}{4}$ of Section 22, containing 46 acres, a portion of Section 22, containing 87.3 acres, the $SW\frac{1}{4}$ of Section 22, containing 46 acres, lots 2, 3 and 6, the $NW\frac{1}{4}NW\frac{1}{4}$, and the $SW\frac{1}{4}NW\frac{1}{4}$ of Section 27, containing 226.12 acres, part of the $NW\frac{1}{4}$ of Section 28, containing 56.3 acres, all land lying south of the Chicago-Milwaukee-St. Paul and Pacific Railroad less 4.6 acres, containing 220.6 acres, the $NW\frac{1}{4}$ less 6.7 acres in Section 22, containing 160 acres, and lots 1 and 2, and the $NE\frac{1}{4}$ of Section 28, containing 271.91 acres, with all of said land being in Township 7 North, Range 45 East. The tract of land containing 46 acres, more or less, lying in the $SW\frac{1}{4}$ of Section 22, Township 7 North, Range 45 East, is more particularly described as follows: Beginning at the $\frac{1}{4}$ section corner common to Sections 21 and 22 in said Township and Range, thence east 2400 feet, thence south 4 degrees 20 minutes west 748.6 feet, thence west 208.7 feet, thence south 4 degrees 20 minutes west 104.4 feet, thence west 2126.9 feet, thence north 850.5 feet on the section line, to said Sections 21 and 22 to the point of beginning.

That portion of land containing 87.3 acres, more or less, in Section 22, Township 7 North, Range 45 East is described as follows:

Commencing at the SW corner of said section and running thence north 908 feet, thence 2,268.9 feet, thence north 4 degrees 20 minutes east 142.4 feet, thence east to the west shore line of the slough, which forms the west boundry line of lot 5 of said section, thence southerly along the west shore line of said slough and the northerly shore line of the Yellowstone River to a point where the said northerly shore line of the Yellowstone River intersects the south boundary line of said section, thence west to the point of beginning.

The tract of land containing 46 acres, more or less, lying in the SW $\frac{1}{4}$ of Section 22, Township 7 North, Range 45 East, is described as follows:

Beginning at the point on the section line common to Sections 21 and 22 of said Township and Range, 850.5 feet south of the $\frac{1}{4}$ section corner common to said Sections 21 and 22, thence east 2,126.9 feet thence south 4 degrees 20 minutes west 104.4 feet, thence east 208.7 feet, thence south 4 degrees 20 minutes west 779.6 feet, thence west 2,268.8 feet, thence north 881.5 feet on the section line common to Sections 21 and 22 to the point of the beginning.

Lots 2, 3 and 6, the NW $\frac{1}{4}$ NW $\frac{1}{4}$, and the SW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 27, Township 7 North, Range 45 East, containing 226.12 acres; all of Section 21 lying south of the Chicago, Milwaukee, St. Paul and Pacific Railroad Company right-of-way, containing 220.6 acres, excepting therefrom the following described lands and premises, to-wit:

Beginning at the SW corner of Section 21, Township 7 North, Range 45 East, thence due north along the west line of said Section 21, 517.0 feet more or less to the southerly line of the Chicago, Milwaukee, St. Paul and Pacific Railroad right-of-way, thence north 63 degrees 27 minutes east along the south line of said right-of-way, 151.2 feet, thence south 36 degrees 41 minutes east 722 feet, more or less, to the south line of the above mentioned Section 21, thence due west along the south line of the said Section 21, 570.0 feet, more or less, to the point of beginning containing 4.6 acres, more or less, all being in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 21, Township 7 North, Range 45 East.

That part of the NW $\frac{1}{4}$ of Section 28, Township 7 North, Range 45 East, containing 56.3 acres, more or less, is described as follows:

Commencing at the $\frac{1}{4}$ section corner on the north line of said Section 28 and running thence due south along the $\frac{1}{4}$ section line 2,275.5 feet, thence south 83 degrees 33 minutes west 546.2 feet, thence north 48 degrees 32 minutes west 683.7 feet, thence north 4 degrees 42 minutes east 931.7 feet, thence north 21 degrees 23 minutes west 244.2 feet, thence north 27 degrees 43 minutes west 291 feet, thence north 47 degrees 5 minutes west 610.7 feet, more or less, to the north line of said Section 28, thence east on the north line of said section 1,637.7 feet, more or less, to the point of beginning.

The NW¼ of Section 22, Township 7 North, Range 45 East, containing 160 acres, more or less, less 6.7 acres of right-of-way, and lots 1 and 2, and the NE¼ of Section 28, Township 7 North, Range 45 East, containing 271.91 acres.

The above notice of appropriation is on file in Book F, Page 104 of Water Right Records in the Custer County courthouse.

Some of the lands on the Project have been irrigated since 1919, but it was not until 1925 that major improvements were made.

The principal features of the irrigation system are as follows: A pump house with a concrete sump sub-structure that is supplied water from the Yellowstone River by means of a 40 inch pipe. In the pump house the Company maintains two Diesel operated pumps—one a 24 inch centrifugal type pump operated by a 100 horsepower Diesel engine, and the other a 10 inch centrifugal type pump operated by a 60 horsepower Diesel engine. A storage tank having a capacity of 10,000 gallons is maintained to supply fuel to the Diesel engines. The Company has had considerable trouble in the past with ice and high water doing damage to the pump house and washing of land in the vicinity. To alleviate this situation the Company has constructed jetties of rock and timber. It was reported that they functioned very successfully during the high water period in the spring of 1948. From the pump house water is conveyed through a 36 inch wood stave pipe ¼ of a mile to a distribution head-gate of concrete construction. From this point the irrigation water is regulated for the canal system. In addition to the pumps in the main pumping plant the Company operates a 12 inch tractor powered booster pump in the West High Ditch in the SE¼SW¼ of Section 21.

No record as to the cost of water has been kept, and R. R. Jones of the Company said he had no data concerning the original cost of the system. Since 1945 considerable work has been done to improve the Project.

The topography is favorable to irrigation and the soils run from a river silt to heavy clay. With the exception of a strip of heavy gumbo in Section 21 the soils are considered to be productive. The water supply is considered adequate. The principal crops are sugar beets, alfalfa, and small grains. The Company maintains about 2,600 sheep and 50 head of cattle. These are ranged on the adjacent hills during the summer months and are brought to the Project to winter. The Project is located on the north side of the Yellowstone River between Whitetail Creek and Swede Creek in the vicinity of Sheffield.

In 1947 there were 800.00 acres under irrigation in the Sheffield Ranch Company Project under existing facilities, with a potential acreage of 35 acres, or a maximum irrigable acreage of 835.00 acres.

TONGUE RIVER WATER USERS' ASSOCIATION

The State Water Conservation Board received an Offer from the Government, dated April 12, 1937, and accepted by the Board on April 28, 1937, which was amended by an Offer from the Government, dated October 6, 1938, and accepted by the Board on October 19, 1938, in which the estimated cost of the Project was \$1,200,000 of which \$540,000 was a grant and \$660,000 a Loan. It required the formation of the Tongue River Water Users' Association, and the sale of 35,000 acre feet of water on Water Purchase Contracts, acceptable to the Finance Division of the PWA.

The Tongue River Water Users' Association was incorporated under the Laws of Montana on May 24, 1937.

ARTICLES OF INCORPORATION of TONGUE RIVER WATER USERS' ASSOCIATION

KNOW ALL MEN BY THESE PRESENTS: That we, the undersigned, pursuant to and in conformity with the provisions of Chapters 12 to 23, Civil Code, Revised Codes of Montana, 1935, and Acts amendatory thereof or supplemental thereto, associate ourselves together, not for profit, and do hereby adopt the following Articles of Incorporation:

ARTICLE I

The corporate name of this corporation is hereby declared to be TONGUE RIVER Water Users' Association.

ARTICLE II

The objects and purposes for which this corporation is formed are as follows:

1. To appropriate, purchase, market, sell, pump, divert, develop, furnish, distribute, lease and dispose of the waters of the Tongue River, which will be impounded by means of a dam or dams, and a storage reservoir or reservoirs, and such other structures as may be necessary to carry out the purposes of the Association, and the waters from the tributaries of the foregoing river, creeks and streams and from all other available sources of supply, together with the return flow of all the foregoing waters furnished or supplied by seeping or over-flowing from the previous place of use of such waters, and the waters from other dams, reservoir, diversion canals, distributing canals, lateral ditches, pumping units, mains, pipe lines and water works systems.

2. To enter into and carry out agreements with the State of Montana, the State Water Conservation Board, the United States of America, or any instrumentality or agency thereof, any person, firm, association, corporation, private, public or municipal with reference to the purchasing, marketing, furnishing, distributing and selling of the aforesaid waters, and of the privilege of obtaining such waters when available, and the diversion, development, disposition and utilization of such waters, the charging, collecting and disposition of rents and revenues for such waters and privileges, the operation, maintenance, repair, alteration, construction, reconstruction and supervision of the means of conserving and distributing such waters.

3. To construct, reconstruct, maintain, repair, alter, use, control and operate dams, reservoirs, irrigation works and systems, drainage works and systems, diversion canals, distributing canals, lateral ditches, pumping ditches, pumping units, mains, pipe lines, water works systems and other means of conserving and distributing the aforesaid waters.

4. To lease, sell or otherwise dispose of water, water rights, lands, easements and/or property which it may acquire.

5. To acquire, own and hold such real and personal property as may be necessary or convenient for the transaction of its business.

6. To incur indebtedness upon its bonds, notes, contracts or other evidences of indebtedness, and to secure the same by mortgages, deeds of trust, pledges of any or all of its revenues and contracts, or in any other manner, subject, however, to the approval of any such indebtedness by resolution of the State Water Conservation Board.

7. To acquire, hold and dispose of stock in other corporations, domestic or foreign.

8. To acquire by purchase, forfeiture or in any other legal manner, shares of the capital stock of this corporation, and to acquire and exercise options thereon, and to dispose of, re-issue or cancel same as the Board of Directors may determine.

9. To have and exercise all the powers and to perform any and all acts necessary, convenient and appropriate to carry out any one or more of the said purposes or anything incident thereto, or which shall at any time appear conducive or expedient for the protection or benefit of the Association or its shareholders, and to that end to enter into any contract, agreement or other arrangement with the State of Montana, the State Water Conservation Board, the United States of America or any instrumentality or agency thereof, or any person, firm, association, corporation, private, public or municipal, or any state or foreign government.

10. To make and promulgate By-Laws, for the government and control of this corporation. The By-Laws, or amendments thereto, adopted by the Board of Directors shall be and become effective only after their approval by the State Water Conservation Board.

11. The powers herein granted and conferred, shall be exercised only with the approval of the State Water Conservation Board.

ARTICLE III

The principal place of transacting the business of the corporation shall be at MILES CITY, in the County of CUSTER, State of Montana.

ARTICLE IV

This corporation shall continue in existence for the term of forty (40) years from and after the filing of these Articles of Incorporation.

ARTICLE V

The number of directors who shall manage the affairs of this corporation shall be five (5), and the names and residences of those who are appointed for the first three months, and until their successors are elected and qualified are as follows:

Name	Residence
Albert G. Brown	Birney, Montana
A. M. Ball	Brandenberg, Montana
James Jackson	Garland, Montana
Wm. H. Blum	Miles City, Montana
Carl R. Herzog	Miles City, Montana

ARTICLE VI

The Capital Stock of said corporation shall be *Fifty Thousand (\$50,000.00)* Dollars, which shall be divided into *Fifty Thousand (50,000)* Shares of the Par Value of One Dollar (\$1.00) each. Each shareholder of the capital stock of this corporation shall be entitled to one (1) vote for each share of stock owned by him.

Capital shares of stock of this corporation shall be subject to purchase, sale or forfeiture under such terms and conditions as are provided by the By-Laws of the corporation and its subscription and pledge agreements with shareholders. Except with the consent of the corporation, no stock of this corporation shall be transferred on the books of the corporation so long as the owner or owners thereof are obligated in any way to the corporation, whether such obligations be matured or unmatured or be under a subscription agreement or note, a water purchase contract or otherwise.

The private property of the stockholders of this corporation shall not be liable for the obligations of the corporation except as in the By-Laws of the corporation otherwise provided.

ARTICLE VII

That the amount of the Capital Stock actually subscribed is *Five (\$5.00)* Dollars, as follows:

Name	Amount
Albert G. Brown	\$1.00
A. M. Ball	1.00
James Jackson	1.00
Wm. H. Blum	1.00
Carl R. Herzog	1.00

Witness our hands and seals this 17th day of May A. D. 1937.

(Albert G. Brown)
(A. M. Ball)
(James Jackson)
(Wm. H. Blum)
(Carl R. Herzog)

STATE OF MONTANA }
County of Custer }^{ss}

On this 17th day of May, A. D. One Thousand Nine Hundred and Thirty-Seven, personally appeared before me, a Notary Public for the State of Montana, *Albert G. Brown, A. M. Ball, James Jackson, Wm. H. Blum, and Carl R. Herzog*, whose names are subscribed to the foregoing instrument, as the parties thereto, and who, each of them duly acknowledged to me that they each of them respectively, executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

(SEAL) (W. R. CALVIN)
Notary Public for the State of Montana Resid-
ing at Miles City, Montana.
My commission expires November 6, 1937.

Water Purchase Contracts in the amount of 35,000 acre feet of water, on contracts acceptable to the PWA, were secured and approved by the Association on December 11, 1937, and by the Board on December 15, 1937. The Bond Transcript was then completed and Bonds sold to the Government on May 5, 1938.

Bids for the construction of the Project were received on June 19, 1937. The low bidder was Jerome C. Boespflug, Miles City, (\$752,364.54), and the contract was awarded on the same day, subject to approval of the PWA. Work was started on June 28, 1937, and accepted as completed by the Board on May 26, 1939.

After the original contract was completed, it was determined that additional work was required consisting of construction of additional cut-off trench and grouting in and about the dam. The additional work was acceptable to the PWA, and accordingly the Board received an Amended Offer, dated May 1, 1940, which was accepted on May 7, 1940, wherein the amount of Grant as set forth in the original Offer of \$540,000 was increased to \$579,420.00. Bids for this additional work were received on June 15, 1940, and the contract was awarded to Jerome C. Boespflug in the amount of \$83,889.00.

Under the Water Marketing Contract between the Association and the Board, the Association agreed to pay to the Board the sum of \$45,500.00 on November 1, 1939, and to and including November 1, 1967.

To secure funds to construct the Project, the Board issued its Water Conservation Revenue Bonds, Series "L", in the amount of \$660,000, dated May 1, 1938, secured by a Trust Indenture of the same date which was executed by the Board and the Montana National Bank of Billings as Trustee. The Indenture provides for the pledge of all of the revenues of the Project for the payment of interest on and principal of the Bonds. These Bonds bear interest at 4% per annum, payable May 1st of each year and commencing with the year 1939, and with first Bond principal in the amount of \$8,000.00 due May 1, 1941 and increasing annual payments to the sum of \$33,000.00 due May 1, 1977. The security mentioned consists of a Water Marketing Contract between the Board and the Association, and Water Purchase Contracts entered into between each individual Water Purchaser, the Association and the Board.

The original list comprises 270 Water Purchase Contracts totalling 35,000 acre feet of water, at \$1.30 per acre-foot per year, commencing with the year 1939 to and including the year 1975. If all amounts due under the contracts were paid there would be sufficient monies to pay all interest and principal and provide a reserve of approximately 33 per cent. This, however, is not the case and many contracts are delinquent. The reason that the project is not a success from a financial standpoint is stated well by Joseph Muggli, Secretary of the Tongue and Yellowstone River Irrigation District, which is the largest single appropriator of water on the Tongue River both in Montana and Wyoming and holds the lowest right on the Tongue River. His views were also expressed by other water users. Mr. Muggli had this to say: "It is not possible for the individual water purchaser, under the contract with the Water Users' Association, to anticipate his water needs in sufficient time to permit water being discharged into the Tongue River channel at the storage dam and accurately calculate the time that will elapse until such water will reach his headgate or canal intake." This situation is more difficult for the water purchaser who is under a canal system; such as, the Tongue & Yellowstone River Irrigation District because he orders water as an individual and not through the District. Muggli also had this to say: "I was of the opinion when the Association was formed, and still am of the same opinion, that an irrigation district should have been formed of all the land along the Tongue River suitable for irrigation, and the district so formed to assume the burden of payment for the storage dam. Another important fact is that a considerable portion of the original signers have either died or sold their lands and new land owners are not paying any attention to outstanding Water Contracts made by a previous land owner, with the result that no payments are collected on such contracts. In an irrigation district, the passing of ownership does not relieve the new owner from meeting assessments that have been made against the land."

Thus, we have one side of the picture. The other is that the project was constructed as an emergency relief measure, and by the construction of said project gives the water users in the Tongue River Valley insurance against drought at a much cheaper cost than if all expenditures were met by the State without Government aid.

TONGUE & YELLOWSTONE RIVER IRRIGATION DISTRICT

The Tongue and Yellowstone River Irrigation District was organized in accordance with the provisions of an act of the Legislative Assembly of the State of Montana, said act being approved March 18, 1909. Petition for the organization and establishment of the District was filed April 29, 1911 in the office of the Clerk of the District Court of the Seventh Judicial District. The Court Order creating the District was issued June 24, 1911. The District is a quasi-public corporation that issues no stock, and therefore has no shares outstanding.

After its creation in 1911 the District purchased the canal and water rights of the Miles City Canal and Irrigating Company. The original bond issue made in 1915 was for \$195,000.00. In 1920 an additional bond issue was sold for \$40,000.00. As of February 26, 1948 the District had no bonded indebtedness, with approximately \$3,000.00 in sinking fund warrants outstanding.

The irrigation system, including 27 miles of main canal, canal structures and the diversion dam, has been appraised by the District to value \$228,000.00. The 1947 assessment per assessed acre was \$1.50. Of this amount \$1.00 was for operation and maintenance and 50 cents for the sinking fund to take care of outstanding warrants. There are 9,773.16 assessed acres in the District.

Water for the District is diverted from the Tongue River by gravity in the northeast quarter of the southwest quarter of Section 29, Township 6 North, Range 48 East. At the point of diversion the District maintains a timber crib rock filled diversion dam, approximately 300 feet in length, across the Tongue River. At the intake the main canal has a capacity of 10,000 miner's inches of water, which is regulated by two steel gates set in concrete retaining walls. Other important structures included in the system are: Pumpkin Creek Syphon, approximate length 220 feet, which consists of two metal pipes—one being 54 inches and the other 72 inches in diameter, these being set in concrete retaining walls; Pumpkin Creek Spillway of concrete construction with three five foot screw type gates; Squaw Creek Flume, 72 feet in length, style No. 168 Hess type metal, with timber substructure; Mill Creek Flume—a metal Hess type with timber substructure 120 feet in length, inlet and outlet of concrete construction; Mill Creek Spillway, which has three gate openings with metal Hess type No. 156 flume to creek; Log Creek Flume and Spillway, which is a Lennon type flume No. 156, 210 feet in length with concrete inlet and outlet; Cowles Creek Flume and Spillway, which is a metal No. 156 Lennon type flume, 134 feet long with concrete inlet and outlet; Cemetery Spillway, which is of concrete construction, having four five foot gate openings which are used to spill surplus water in the wasteway canal to the Tongue River; Kircher Creek Flume, which is a metal Hess type flume 110 feet long with a concrete inlet and outlet, with a concrete spillway having five 36 inch gates; Bensley Creek Flume, which is a creosoted plank and timber flume 104 feet long, 3 feet by 8 feet in size. This flume has a concrete inlet and outlet, with spillway of sufficient size to take full capacity of flume; Jones Creek Flume, which is a metal size 84 Lennon type flume 255 feet long with timber substructure, inlet and outlet of concrete construction with spillway in flume; Kelley Creek Spillway and Syphon, which consists of a 30 inch pipe under Kelley Creek and a spillway with a 5'x5' gate. All structures are in good repair.

The District, since its organization in 1911, has operated under the same name and does not supply water to any other source. It includes land lying on the east side of the Tongue River and south of the Yellowstone River adjacent to Miles City, the County Seat of Custer County.

The principal crops are sugar beets, alfalfa hay, alfalfa seed, small grains and corn. Some potatoes and vegetables are also grown. Alfalfa is the basic crop for the District. Livestock has an important part in the agriculture of the District, with some dairy cattle, beef cattle, hogs and poultry being kept on most farms. To supply local needs some dairying is being carried on. Beef cattle from adjacent ranges are brought to the District to be wintered.

The topography is favorable for irrigation and very little seepage has occurred. A gross area of 11,155 acres is included in the District. The water supply is adequate in years of normal precipitation, short in drier years. The water supply was very short in 1934 and 1936. In case of water shortage users are placed on rotation periods.

Outside of the gross area of the District it is estimated that there are 600 acres of potential irrigable land on the east side of the Tongue River and the south side of the Yellowstone River. There is also some 5,000 acres of potential irrigable land on the west side of the Tongue River, below the District diversion dam, that could be irrigated from the Tongue River. These lands are a part of old Fort Keogh and are still under government ownership. Headgates could be installed on the west end of the District diversion dam, from which the necessary canal system could be constructed. Additional water for these acres could be obtained from the Tongue River storage reservoir. (A complete account of the Tongue River dam and reservoir is contained in Part One of the Big Horn County Water Resources Report, as of May, 1947.)

What is now known as the Tongue and Yellowstone River Irrigation District was first organized on December 21, 1885 by Walter B. Jordan, Thos. J. Bryan and Wm. N. Macqueen, who formed the Miles City Irrigating and Ditch Company. The Company was incorporated for twenty years with a capital stock of \$100,000.00. The incorporation was made in accordance with the laws of the Territory of Montana.

On August 9, 1886 the Miles City Irrigation and Ditch Company filed on 25,000 miner's inches of water to be diverted from the Tongue and Yellowstone Rivers. The point of diversion was described as a point on the east side of the Tongue River at point of Bluff about 800 feet above the mouth of Pumpkin Creek and about 13 miles above Miles City by county road. The purpose was for irrigation, milling, or town supply. The system was described as a ditch 6 to 15 feet wide at the bottom, 6 to 25 feet wide at the top and from 2 to 5 feet deep, with slopes of one to one. The place of intended use was described as lands in the Tongue and Yellowstone River Valleys, for the town of Miles City or any other town. The notice of appropriation is filed in Book "A", Page 23 of Water Right Records, in the Custer County Courthouse.

On February 15, 1893, H. B. Wiley filed a notice of appropriation for an additional 25,000 miner's inches of water to be diverted from the Tongue River. The Miles City Irrigation and Ditch Company was named appropriator. The point of diversion was described as

a point or bluff upon the west side of the Tongue River 800 feet from and south of the mouth of Pumpkin Creek, a tributary of the Tongue River and about 13 miles south of Miles City. The purpose was to be for irrigation, watering agricultural and other lands under the line of the ditch, and furnishing water to Miles City and other towns and villages under said ditch for both domestic and public use; also for furnishing water and water power, for manufacturing, milling and other purposes along the line of said ditch, and on land in the Yellowstone Valley, and upon the south side of said river from its junction with the Tongue River, and down the said Yellowstone River in a northeasterly direction to the village of Terry, a distance of 45 miles from Miles City. The system was described as a substantial dam of wood and stone constructed across the said Tongue River about 13 miles south of Miles City, a head-gate of sufficient capacity and size to carry 50,000 inches of water constructed in the form required by law to measure same, and an open surface ditch with flumes wherever necessary and extending along and at the base of the foothills on the east side of the Tongue River Valley in a generally northerly direction to its junction with the Yellowstone Valley, thence in a generally northeasterly direction along and at the base of the foothills upon the south side of the said Yellowstone Valley to the terminous of said present ditch near Dixon station about ten miles from Miles City, and by an extension of said ditch down said Yellowstone Valley to and upon that portion of the Yellowstone Valley known as the "Terry Bottom" in the vicinity of Terry Station, located upon the Northern Pacific Railroad right-of-way in Custer County, in such a manner that said ditch will supply water to all the bottom or level land upon the south side of the Yellowstone River from Miles City to Terry. The notice of appropriation is filed in Book "A", Page 141 of Water Right Records in the Custer County Court-house.

On February 18, 1895 a certificate was filed in the Custer County records changing the name of the Miles City Irrigation and Ditch Company to the Miles City Canal and Irrigating Company. In the years to follow the various transacions listed herewith led to the acquisition by the Tongue and Yellowstone River Irrigation District of the water rights held by the Miles City Canal and Irrigating Company.

On December 1, 1905 the Miles City Canal and Irrigating Company was mortgaged to the Northwestern Trust Company in the amount of \$150,000.00, recorded in Book 1 of Mortgages, Page 355.

On September 30, 1911 mortgage foreclosure, Northwestern Trust Company vs. Miles City Canal and Irrigating Company, Civil Case No. 2795.

On March 24, 1913 Sheriff's deed transferring holdings and water rights of Miles City Canal and Irrigating Company to the Northwestern Trust Company, recorded in Book 27 of Deeds, Page 517.

On April 15, 1914 the District Court ordered, adjudged and decreed the Miles City Canal and Irrigating Company 7,500 miner's inches of the water from the Tongue River, with a date of priority as of August 9, 1886, Court Case No. 2809.

On September 23, 1914 Northwestern Trust Company deed to Walter B. Jordan, recorded in Book 30 of Deeds, Page 401. The Northwestern Trust Company were evidently holding bonds in trust for Walter B. Jordan, who was president of the Miles City Canal and Irrigating Company, as it was generally assumed that he owned the irrigation system.

November 4, 1914 contract entered into between Walter B. Jordan and the Tongue and Yellowstone River Irrigation District for purchase of the Miles City Canal and Irrigating Company system and water rights by the District.

On October 1, 1920 Walter B. Jordan deeded to the Tongue and Yellowstone River Irrigation District water rights and irrigation system of former Miles City Canal and Irrigating Company, filed for record September 22, 1922 and recorded in Book 41 of Deeds, Page 450.

The District was created in 1911 with the intention of purchasing the water rights and irrigation system from the Miles City Canal and Irrigating Company, but because of the various reasons stated and the necessary litigation several years elapsed before the transaction was completed.

The Tongue and Yellowstone River Irrigation District was in existence at the same time that the Miles City Canal and Irrigating Company operated the irrigation system.

As a result of the case of the Miles City Canal and Irrigating Company et al. vs. Erasmus R. Lee et al, the Tongue River was adjudicated. The District Court, upon hearing and testimony, decreed and established the date of priority and number of inches of water to each water user on the Tongue River. As it now stands the District has a water right for 7,500 miner's inches, with a date of priority as of August 9, 1886 from the Tongue River.

In 1947 there were 8,890.86 acres being irrigated under the Tongue and Yellowstone River Irrigation District, with a potential acreage under existing facilities of 1,183.78 acres, or a maximum irrigable acreage of 10,074.64 acres.